CARLSON SYSTEMS, LLC

MID-ATLANTIC fasteners LLC

WesternTool Supply

PACKAGING MACHINES & SUPPLIES

Interior Packaging

Carton Closing

Carton Marking

Strapping/Tying

Palletizing/Unitizing

Stretch Wrapping

Material Handling, Industrial Fastening & Supplies

Our Company

Serving the Packaging Industry Since 1947

Carlson Systems is a leading distributor of the most recognized brands of construction and packaging machines, tools and supplies in the industry – supported by our network of service and repair technicians. The company has evolved over the past 66 years to encompass over 60 locations in the United States and Mexico.

This success story had its humble beginning in Omaha, Nebraska, when in 1947, Carl and Julia Carlson founded Carlson Stapler and Supply in the basement of their home with nothing more than a $350 cash investment, a used file cabinet, and their own enthusiasm.

In the decades that followed, the company added to its product line and expanded its territory throughout the Midwest, eventually adding southwestern locations as well. The company name was simplified to Carlson Systems, but kept the familiar CSS logo and the founders' philosophy to provide the highest quality products along with outstanding service and support to our customers.

Carlson Systems was joined by **Mid-Atlantic Fasteners** in 2006. Sharing a similar beginning, Mid-Atlantic Fasteners was established out of a garage in Baltimore, MD just after World War II as a Duo-Fast distributor. Most of their early customers were upholstery shops, furniture manufacturers and millwork companies. Primarily serving the Mid-Atlantic region of the east coast, the business grew over the years and began selling competitive lines, which allowed them to expand into new markets with new customers.

Another acquisition occurred in 2013 with the addition of **Western Tool Supply Company**. Western Tool Supply was founded in 1982, with its headquarters in Salem, Oregon. The addition of Western Tool Supply expanded Carlson Systems' presence in the northwestern U.S. The companies were a good fit because, like Carlson Systems, Western Tool Supply had a strong devotion to customer satisfaction through breadth of product, product expertise, and great order fulfillment, with the added benefit of tool and equipment repair service.

Focusing on fastening, packaging and product assembly systems, the offices and warehouses of Carlson Systems, Mid-Atlantic Fasteners and Western Tool Supply serve thousands of customers across the country and into Mexico. A group of problem solvers, we provide ideas and solutions in both the products we offer and the methods we propose. We offer the highest quality products along with outstanding service and support to our customers.

In our 67th year of business, we recognize the remarkable successes we have shared and the thousands of relationships we have built. We are grateful to our many customers and suppliers who have been instrumental to our business and we look forward to many more rewarding years together, living the values established by our founders.

Carlson Systems' Founders
(left to right) **Carl with sons Robert, Joe and Don Carlson.**

Robert, Don and Joe Carlson.

Our Mission

To develop strong business relationships so we understand our customers' individual needs and provide the best possible solutions to improve their profitability.

Our Goal

- To better serve our customers and out perform the competition
- To be so good at what we do that no one can do it better
- To serve the market with the highest quality, unique fastening and packaging products and systems
- To maximize the use of information technology and logistics in order to meet our customers' needs

We have over 60 locations to serve your packaging machine and supply needs.

PACKAGING MACHINES & SUPPLIES

One source for all of your packaging needs, inside and outside the box.

Cushioning

Package cushioning is used to help protect fragile items during shipment. Shock and vibration are controlled by cushioning, so that the chance of product damage is reduced significantly. Cushioning functions include blocking & bracing and positioning products in a box.

PadPak material is generated, on-demand, by a converter that separates the multiple layers of paper, traps air between the paper layers, and forms cushioning pads. No tools or special training is needed to use a PadPak converter. In fact, all you need is a 110 volt outlet. The systems offered vary in size and configuration to accommodate any application.

PadPak Senior Converter

There are more paper choices and sizes than those shown.

Ask your Account Manager for details on the Loan Program for these machines!

PadPak® Senior

PadPak Senior is a versatile 2- or 3-ply paper packaging system that can accommodate all in-the-box packaging needs and applications from cushioning to wrapping, and blocking and bracing.
- For high volume applications
- Standard roll of 3-ply 30" x 450' paper yields, on average, 60 cubic feet of packing

PadPak Senior Paper (Regular, Double, Jumbo or Jumbo Adhesive)

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
2-ply	30	30/30	450
		30/50	900
		50/50	1350
3-ply	30	30/30/30	450
		30/50/30	900
		50/50/50	1350

PadPak® Jr.

PadPak Jr. is a compact machine, capable of providing high performance to small volume packing departments. This mobile paper converter can be used in the widest variety of applications where flexibility is desired.
- Handle serves as paper feed/cut mechanism
- For lower volume applications
- Standard roll of 3-ply 27" x 450' paper yields, on average, 52 cubic feet of packing

PadPak Jr. Converter with Electric Cut

PadPak Jr. Converter

PadPak® Jr. with Electric Cut

PadPak Junior Paper

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
2-ply	27	50/50	450
3-ply	27	30/30/30	450

PadPak LC™

PadPak LC converts 45- or 55-lb. fanfold kraft paper into an effective light cushioning pad for fast, efficient cushioning or blocking and bracing packaging applications.
- Standard roll of single-ply 30" x 1000' fanfold paper yields, on average, 75 cubic feet of packing

PadPak LC Converter

PadPak LC Paper

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
Fanfold	30	45	1200
Fanfold	30	55	1000

Pad-N-Pak® Workstation

Pad-N-Pak Workstation is a complete packing station that includes a standard PadPak Senior fitted with a curved chute to facilitate use with the workstation. The standard Pad-N-Pak Workstation includes a PadPak converter, work table, remote box and paper roll lifter. Many other options are available.
- For high volume applications, Converter slides in and out from under table for easy paper loading
- Can use with existing workstation table or with Ranpak table
- Standard roll of 3-ply 30" x 450' paper yields, on average, 60 cubic feet of packing

Pad-N-Pak Workstation

Wrapping

Wrapping packaging applications provide protection against scratching, surface abrasion and minor handling incidents. It also prevents damages caused by internal impact when multiple items are packed together. Wrapping application functions include box-lining, separating and wrapping.

Void Fill

Void fill protects products from damage by filling the excess space in the shipping box. This prevents the movement of the content, thus securing the shipment. Void fill functions include top fill and side fill.

The FillPak system generates a geometrically shaped "PaperStar" configuration for high volume, high speed top and side void fill applications, on-demand, right on your factory floor at speeds up to 55" per second. Just plug it in, load the paper and you're ready to generate void fill material.

FillPak TT®

Void Fill On Demand Where and When You Need It

FillPak TT converts 15" single-ply, fanfold kraft paper into a PaperStar™ configuration for fast and efficient void fill material to protect products in shipment.

- Standard bundle of single-ply 15" x 1660' fanfold paper yields, on average, 50 cubic feet of packing

FillPak TT® Cut Mechanism

> One 15" bundle replaces up to three 14 cu. ft. bags of peanuts!

Gives FillPak TT the Ability to Cut and Predefine Paper Lengths

In addition to adding a cut mechanism to the FillPak TT, the upgrade also gives the operator the ability to pre-set paper lengths via an Electronic Delivery System (EDS) mode.

FillPak TT Paper

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
Fanfold Box	15	30	1660
Fanfold Box	15	45	1200

*30-lb. also available in 100% recycled and white.

FillPak®

Offers High Volume Void Fill with Speed and Cost Efficiency

The FillPak system converts fanfold kraft paper at a high speed into a PaperStar™ configuration for fast and efficient void fill while giving the operator the ability to pre-set paper lengths via an Electronic Delivery System (EDS) mode.

- Standard bundle of single-ply 30" x 1660' fanfold paper yields, on average, 100 cubic feet of packing

AccuFill®

> One 30" bundle replaces up to seven 14 cu. ft. bags of peanuts!

Measure and Calculate the Accurate Amount of Void Fill, Every Time

AccuFill is the solution to optimizing the amount of void fill used in high volume packaging operations. As boxes come down the line, the AccuFill sensors scan the box to determine its size, measure the volume of the objects inside the box and compute the amount of paper needed to fill the void. It then signals the FillPak converter to dispense the exact amount of paper needed - no guesswork required.

- Standard bundle of single-ply 30" x 1660' fanfold paper yields, on average, 100 cubic feet of packing

FillPak and Accufill Paper

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
Fanfold Box	30*	30**	1660

*Also Available in 32-lb. white   **Also Available in 100% recycled

WrapPak® PS Pack Station

On Demand Wrapping Option Within a Small Footprint

The Pack Station WrapPak converter forms two sheets of fanfold kraft paper into a resilient and shock absorbing 12" PaperWrap pad.

- Produces 18" of wrapping pad per second. Three modes of operation.

WrapPak® FS Full-Size

High Volume Padding for All Wrapping Needs

The WrapPak converter forms two bundles of fanfold kraft paper into a resilient and shock absorbing cushioning pad. Five modes of operation.

- 12" wide pad is automatically cut to the exact length.

WrapPak Paper is ideal for lining the bottom of a box, product separation or securely wrapping products.

Paper Type	Width (in.)	Basis Weight (lbs.)	Length (feet)
Fanfold	15	30	1660
Fanfold	15	45	1200
Fanfold	15	55	1000

FillPak TT Converter

FillPak TT Converter with Cut Mechanism

FillPak Converter

FillPak with AccuFill Voidfill Measurement System

WrapPak PS Pack Station

WrapPak FS Full-Size

No special tools or training are needed to use these machines.

Protective Packaging: Cushioning, Blocking and Bracing, and Void Fill

A PRODUCT OF AUTOMATED PACKAGING SYSTEMS

Industries such as mail order houses, electronic suppliers, automotive parts suppliers, and office supply stores use air pillows to cushion their products during shipment. Using an automatic machine, continuous strips of air pillows can be created, allowing users to speed up their packaging time.

Pregis AirSpeed Smart

Pregis AirSpeed® Smart™ Inflatable Void Fill Packaging

A convenient and cost-effective way to create inflatable packaging cushions on-demand for compact packaging operations. This system turns flat, easy-to-store film into lightweight, non-abrasive void fill packaging. The product in collapsed form takes up less than 1% of the space as it does when air filled, making it a space saving alternative to standard void fill packaging such as paper or peanuts.

- Simple start/stop operation.
- Perfect for small or decentralized work stations.

Pregis AirSpeed Void-Fill Film
- Multiple sizes and grades of film available.
- Wider, true width film yields 10–20% more void-fill than competitive films.
- Excellent puncture resistance and seal ability; non-abrasive surface.
- Recyclable; recycling category #4.
- EP-Flex™ Renew™ film: recycled content, recyclable and biodegradable.

Pregis AirSpeed HC

Pregis AirSpeed™ HC Inflatable Hybrid Cushioning System

Produces pillows at speeds up to 75 feet per minute. Two pillow sizes available depending on use: 8 squares x 8 squares (for 3/4" cushion) or 5 squares x 5 squares (for 1-1/4" cushion). The sheets are perforated for easy tear. **One pallet of AirSpeed HC film can be converted into the equivalent protection of almost one-and-a-half truckloads of traditional bubble!**

- Adjustable air pressure and multiple film sizes.
- Multiple machine options provide operational flexibility.

Pregis AirSpeed HC Hybrid Cushioning Film
- Multiple film choices to maximize performance.
- Excellent film clarity and configuration.
- High yield configurations provide reduced material consumption.
- All films are recyclable as a category #4.
- HC Renew™ film: recycled content, recyclable and biodegradable.

AirPouch Express 3

AirPouch™ Express 3 Table Top Air Pillow System

This system operates in either semi-automatic or automatic modes creating continuous strips of air pillows - featuring patented EZ-Tear™ perforation. This feature makes both handling and separating the pillows much faster and easier.

AirPouch EZ-Tear Air Pillow Materials
The AirPouch Express 3 Air Pillow System uses DuraClear 2000 (DC2) material for strong, durable air pillows that improve protection while reducing packing and shipping costs.

- Available in the standard 2.0 mil for most void fill packing applications (yields 3000 linear feet per box), or in a 1.5 mil gauge for a lower-cost alternative (yields 4000 linear feet per box).
- Available sizes: 8" and 10" wide in various standard lengths.
- Material options include: DuraClear 2000, biodegradable or recycled.

AirPouch FastWrap

AirPouch FastWrap Protective Packaging System

Highly flexible system produces bubbles and tubes on-demand for wrapping, interleaving and block-and-brace applications. Tabletop, all-electric system operates at 65 feet per minute and combines with a variety of accessories, making it ideal for any sized pack station.

AirPouch FastWrap Bubble on Demand Packaging Materials
FastWrap Bubble on Demand is available in 12" (3/4" loft) and 14" (1-1/4" loft) widths, pre-perforated every 10" so the packer can select the right amount of material. The channel-filled honeycomb design allows for multi-directional wrapping and improves product protection.

FastWrap tubes are used in block-and-brace applications, and feature our exclusive EZ-Tear™ perforations between each tube, making them easier to separate while decreasing product waste.

- Material options include: DuraClear 2000, biodegradable or recycled.

Air pillows are an easy-to-use, on-demand packaging solution.

Pregis IntelliPack® SmartSHOT® Foam-In-Place System

The SmartSHOT is IntelliPack's standard handheld, foam-in-place packaging system designed for small, medium and large applications that require protective void fill, blocking and bracing, and cushioning during the shipping and handling process.

- Tapered dispenser
- Long lasting mixing module
- Telemetry
- Heated dispenser minimizes cold-shots
- Insulated handle stays cool
- Bar-coding

Pregis IntelliPack® SmartBAGGER®
Foam-In-Place System

IntelliPack's SmartBAGGER™ is foam-in-bag packaging technology ideal for high-volume, medium to large applications that require protective void fill, blocking and bracing, and cushioning during the shipping and handling process.

- Ergonomic design
- Easy-to-replace sealing wires and edge seal arbors
- Long lasting mixing module
- Cellular telemetry
- Intuitive control panel
- Bar-coding

Pregis Intellipak Smart Bagger Foam-In-Place System

Pregis Intellipak Smart Shot Foam-In-Place System

IntelliPack SmartFOAM™ A/B Liquid Foam
IntelliPack Liquid Foam System
IntelliPack SmartFILM™
IntelliPack SmartLUBE™

IntelliPack systems are specifically engineered to work with the family of consumables: SmartFOAM, SmartFILM and SmartLUBE. Together, they achieve a total packaging solution that provides customers with superior product protection.

	SmartBAGGER	SmartSHOT	SmartSHOT Hybrid	SmartMOLD
APPLICATION	Foam-in-bag	Foam-in-place	Foam-in-place	Pre-mold
FOOTPRINT (approximate machine dimensions)	Height: 65.5" + Stroke Width: 44.6" Depth: 39.1"	New Hanger Height: 8-12' Console Height: 5' (normal varies by install) Heated Hoses: 20' Feed Hoses: 12'	Stand Dimensions: 24"(W) x 44"(T) x 24" (D) Standard wicket bag size 18" (w) x 24" (L) *Other bag sizes available upon request.	Pregis will create and build custom molds for product applications requiring precise and consistent cushion sizes.
UTILITY REQUIREMENTS • Electrical power • Receptacle type	208 or 230 Volts AC 30 Amp dedicated circuit 50/60 Hz Plug configuration = L6-30	208 or 230 Volts AC 30 Amp dedicated circuit 50/60 Hz Plug configuration = L6-30	208 or 230 Volts AC 30 Amp dedicated circuit 50/60 Hz Plug configuration = L6-30	208 or 230 Volts AC 30 Amp dedicated circuit 50/60 Hz Plug configuration = L6-30

Comparing Interior Packaging Options				
	PadPak/FillPak	**Peanuts**	**Bubble Wrap**	**Foam-In-Place**
Applications	Cushion, void fill, block & brace, wrap	Void fill	Wrap	Cushion, void fill, block & brace
Cushioning Factor	Excellent - paper absorbs shock	Products packaged in peanuts will migrate to the bottom of the box leaving the product virtually unprotected	Above average	Depends on type and formulation
System Capabilities	On-demand packaging system to fit any facility environment and any application	Flowable material only - limited by space and ceiling requirements for overhead bin	Limited stand-alone material-dispensing systems available	On-demand system but limited due to floor space constraints and requirements for placing at least two 50 to 55 gallon (typically) chemical drums
Material Length/ Size Adjustments	One touch adjustment for packaging material lengths with zero downtime	Single speed and requires packer to shake box to settle product	Systems available to dispense predetermined lengths	Systems available to dispense predetermined sizes
Package Engineering and System Engineering Support	A free service	Minimal support, or none available	None available	Minimal support, or none available
Environmental Impact:	100% recyclable, renewable and reusable	Primarily a petroleum based product	A petroleum based product-difficult to recycle	A petroleum based product that is not recyclable

Foam-in-place is the right option when your products require protective void fill, blocking and bracing, and cushioning.

Shrink and Bagging Systems

PAC Machinery
The Flexible Packaging Specialists

CLAMCO
A PAC Machinery Company

DAMARK

Shrink wrap is typically a clear plastic or polymer-based film that shrinks when heated to conform to the shape of the object it is wrapped around. Shrink wrap can form a very tight, tamper-evident seal to protect the products from insects or other pests, moisture, dust or other contaminants, and discourage theft. Shrink wrap is commonly used for food bags and in other perishable applications, and is available in a variety of widths, designs, and film gauge, depending on the application.

Clamco 120 Series Shrink Packaging System

Clamco 120 and 220 Combo
Semi-Automatic Shrink Packaging System

Clamco's L-sealer/tunnel combination system includes such standard features as unitized package tray and film cradle with pinwheel perforator, and 11 gauge steel construction throughout.
- Designed to seal and shrink most polyolefin and PVC films
- Unitized sealer/tunnel combination with console stand
- Height-adjustable, heavy-duty seal head with stainless steel film clamps
- Magnetic hold-down featuring adjustable, single large magnet
- Variable-speed Teflon® coated mesh belt-tunnel conveyor
- Made in the U.S.A.

Clamco Dem 6 Combo Shrink Wrap System

Clamco Dem 4 and 6 Combo Shrink Wrap System

The Clamco Dem 4 and 6 combo shrink systems combine a heavy-duty L-bar sealer and heat tunnel for shrink wrapping applications. The Dem seal system minimizes maintenance and eliminates the need for a hot knife seal bar with a proprietary seal wire temperature control. Dem combos are heavy-duty 24/7 machines that can be used with a wide range of films.
- Temperature controlled seal system provides consistently strong seals and increases the life of the seal wire when compared to traditional systems
- Power take-away and tunnel conveyors with a single height adjustment provide for smooth product transfer
- Heavy duty 24/7 shrink system for rugged industrial environments
- Digitally-controlled tunnel with 360° air circulation for consistency and maximum performance
- Automatic pace operation with pneumatic or motorized seal arm (optional)

Clamco Dem 4 Combo Shrink Wrap System

Clamco 6700GLX Automatic L-bar Sealer Shrink Wrap System

The Clamco 6700GLX has an enhanced Allen-Bradley microprocessor PLC, touch-screen interface and I/O diagnostics, memory for up to 20 package sizes, PLC and interface tunnel controls, self-adjusting scrap take-up wheel, microperforators for uniform air evacuation - and much more. All resulting in an automatic L-bar sealer with outstanding speed, throughput and performance.
- Production speeds of up to 40 packages per minute
- Heavy-duty hot knife sealing system with 18" x 23.5" seal area
- Lower film cradle with film splitter and static eliminator
- Adjustable jaw opening for products up to 8" high
- Variable-speed film unwind (23" maximum film width)
- Made in the U.S.A.
- USDA approved

Clamco 6700GLX L-Bar Sealer

Many other L-bar and Tunnel Systems are available!

Clamco Heat Shrink Tunnels

Clamco manufacturers a wide range of heat tunnels for virtually any shrink packaging application. Constructed of heavy-gauge structural steel, Clamco heat shrink tunnels feature heavy-duty blowers, variable air velocity, digital heat control, and variable-speed conveyors. These expertly crafted tunnels are operator-friendly and give an excellent shrink result for virtually any package.

Clamco Heat Shrink Tunnel

Clamco Magnum

Clamco Magnum Automatic Bagger

The Clamco Magnum Vertical is a compact automatic bagging system that uses tubing, in addition to Rollbag™ pre-opened bags on a roll. This bagger offers an easy to operate and low maintenance design that provides the benefit of lower material costs and reduced bag changeover time. As compared to traditional vertical form fill seal systems, the Magnum Vertical eliminates the inconvenience of forming collars, back seaming, and complex controls.

The Magnum is also available in a Horizontal Configuration:
The Magnum Horizontal is designed to meet the unique requirements of large bag packaging with a horizontal loading configuration. It is ideal for long or bulky products or applications requiring special handling or orientation.

The Clamco Magnum makes bags of different lengths at the push of a button, reducing changeover time.

Shrink wrap forms a very tight, tamper-evident seal to discourage theft.

There are a number of flexible packaging options available: biaxially-oriented, multilayer and cross-linked polyolefin, thin-gauge PVC, and polyethylene shrink films. For almost any consumer product there's a shrink film available for your application. Available for manual, semi-automatic or high speed shrink packaging machines.

Polyolefin Shrink Films

Standard Film is recommended for packaging applications where maximum optics and durable wrapping are required. Strong seals and excellent shrink appearance are obtained with medium and high speed packaging systems.
- Very strong, high slip film
- Available in centerfold and single wound
- Especially suitable for high speed automatic applications
- Gauges: 50, 60, 75 and 100

High Performance Film is a versatile shrink film for a wide range of packaging applications. This crosslinked, soft, low shrink force film is especially suitable where low shrinkage temperatures and high shrinkage speeds are required.
- Soft, durable, low shrink force cross-linked film
- Available in centerfold and single wound with a pre-perforated option
- Ideal for soft items and odd shaped products
- Gauges: 45, 60, 75 and 100
- Available in 30 gauge - a thinner film that offers longer roll yields and lower tunnel temperature for cost savings

Tough and Versatile Film is a polyolefin shrink film made with an innovative crosslink process to provide strong, durable seals and excellent shrinkage. Optical properties are superior. This film exhibits outstanding abuse resistance and is easy to use.
- General purpose, forgiving film with wide seal and shrink temperature range
- Available in centerfold and single wound with a pre-perforated option
- Gauges: 45, 60, 75 and 100
- There are 125, 150, 200 and 300 gauge **Tough and Versatile** films available to replace traditional corrugated boxes or heavy gauge polyethylene

Other Options:
Anti-Fog Film to enhance presentation and extend freshness of fresh foods and produce.
- Gauges: 45, 60 and 75

The sealing properties of the **Poultry and Seafood Shrink Film** result in hygienic sealed trays to provide leak proof packages.
- Gauge: 60 and 75

Anti-Static is a transparent shrink film with superior static control capabilities for in-process bundling and ESD overwrap for electronic components and computer parts.
- Gauges: 100
- Centerfold or single wound

Polyethylene Shrink Films
This medium slip film has excellent stiffness and good strength properties. Engineered to meet USPS automatable polywrap mail requirements.

DESCRIPTION/SIZE	GAUGE
16" x 8500'	.90 mil
17" x 8000'	1 mil
26" or 30" x 3500'	1.25 mil

PVC Shrink Film
Strength and durability, combined with sparkling clarity and high gloss. High internal tear resistance and good memory makes this film excellent for irregularly shaped objects.

- Shrinks and seals at a lower temperature for great production
- Can be used with portable or automatic equipment
- Great for retail applications
- Available in three thicknesses: 60, 75 and 100 gauge and these common sizes:

DESCRIPTION/SIZE	GAUGE
8", 10", 12", 14", 15", 16", 18"	60, 75 or 100
20", 22", 24"	60, 75 or 100
30", 36"	60, 75 or 100

All shrink film is available in a number of sizes.

Common Roll Sizes of Polyolefin Shrink Films

Standard Widths are from 6" to 32" in 2" increments - available in a number of other sizes.

Gauge	45	50	60	75	100	125	150	200	300
Centerfold	5,830'	5,250'	4,375'	3,500'	2,625'	2,100'	1,750'	1,310'	875'
Single Wound	11,660'	10,500'	8,750'	7,000'	5,250'	4,200'	3,500'	2,620'	1,750'

Polyolefin is usually soft; if you squeeze a piece of it in your hand, it's soft like saran wrap. **PVC** is crinkly like cellophane. **Polyethylene** is a low density preferential shrink film with good optical properties combined with exceptional strength. It is ideal for multipack utilization applications.

With all three types, the rule of thumb is the higher the gauge, the thicker (and stronger) the film.

Multi-layer Polyolefin Shrink Films

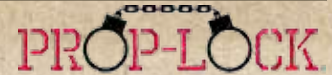| Function	Grade & Thickness	Features
Standard (Syfan 307-S)	50-60-75-100-150 gauge	High shrink force film with excellent stiffness and flatness, making it ideal for multipacking and high speed applications.
High Efficiency (Syfan 307-S)	50-60-75-100-150 gauge	Enriched formulation resulting in a low temperature shrink film with the highest available free shrink.
High Performance (Syfan MVP/Cryovac D940)	45-60-75-100 gauge	A 5-layer shrink film that seals and shrinks at lower temperatures with high free shrink for maximum retail presentation.
Soft Shrink (Syfan MVP/Cryovac D940)	45-60-75-100 gauge	Cross-linked for abuse resistance, a low force shrink film with high free shrink designed for wrapping soft and irregularly shaped items.
Tough and Versatile (Syfan 701/Cryovac D955)	45-60-75-100 gauge	Cross-linked shrink film with enhanced toughness and a broad operating window suitable for a broad range of applications.

Traco SS24SWS Portable Shrink-Wrap System

Traco SS24SWS Portable Shrink-Wrap System
- Portable, lightweight and sleek, the Standard SuperSealer is built to last
- Comes complete with ultra-light HotShot® adjustable temperature heat gun
- Sizes: 13", 18", 24", 32", or 40"
- Also available in deluxe and wand models.

Bagging, Portable Sealing, Vacuum Sealing and Skin Packaging

Automated PACKAGING SYSTEMS   **DAMARK**   **CLAMCO** A PAC Machinery Company   **PROP-LOCK**

SP SYSTEM PACKAGING   **PLEXPACK**   **PAC Machinery** The Flexible Packaging Specialists   **AUDION** AUTOMATION AUDION PACKAGING GROUP

There are many different models of bag sealers, drop sealers and portable sealing machines to choose from; the models shown represent some of our most popular models.

Bagging Systems

Revolutionary bagging and in-line printing systems offer powerful advantages over conventional baggers:

- Optimizes low-cost polyethylene tubing for substantial material cost savings
- Optional in-line thermal transfer imprinting
- Bag lengths can be changed electronically, reducing material inventory
- Ideal solution for a vast array of food, medical, industrial and retail products
- Compact design, very affordable price
- Easy integration with most brands of automatic feed systems (auger fillers, scales, counters, conveyors, disk loaders, etc.)
- Also works with pre-opened bags on a roll

Automatic Drop Sealers

Heavy duty pneumatic impulse sealing systems produce up to 30 bags per minute. Standard heavy-duty shroud completely encloses all moving parts for operator protection. Trims, seals, and bags with or without second security seal as desired; automatically ejects and collects scrap materials. Teflon dispensing roller extends life of sealing element.

- Accepts bags up to 15" wide and 22" long
- PLC controls to monitor and change temperature compensation, allowing smokeless/odorless operation with no required warm-up time

Portable Sealing Machines

- Impulse and constant-heat bag sealers are safe, economical, fast, and built to last.
- Perfect for sealing polyethylene, polypropylene, PVC, foil and surlyn, mylar or bubble pack/padded mailers
- Many options to fit your application needs

Refer to Pages 56-57 for bags and poly tubing

Clamco Bagmaster

Clamco Rollbag 1275

PlexPack MPS 7500 Band Sealer

Audion Sealboy

Prop-Lock® Vacuum Sealer with Internal Compressor

The Prop-Lock vacuum sealer's compact, portable design has outstanding vacuum packaging performance. The heavy-duty design is durable and easy to use with foot pedal activation. With one touch of the pedal, automatically flush out oxygen and moisture, then the automated stainless steel nozzle retracts, and your components are sealed in seconds.

The PL20-IC (20" seal length) and PL30-IC (30" seal length) models are self-contained, retractable nozzle vacuum sealers with built-in air compressors, which eliminates the need for additional equipment. Completely self contained, the sealer is ready to perform out of the box, while saving money by reducing equipment requirements and providing greater flexibility for placement.

- Reduces storage space by 50-75%
- Tamper resistant to insure added security

Prop-Lock PL30-IC Vacuum Sealer

Clamco Vacumaster™ Skin Packaging System

The Vacumaster is an effective way to mount products to a hanging display board or corrugated shipping carton with a strong, clear film. Products that can be skin packaged in the Vacumaster include: hardware (hinges, etc.), fasteners, hand tools, automotive parts, advertising specialties, and anything in a custom shipping box.

The efficient Vacumaster skin packaging machine will work with virtually any skin packaging film and board. Each model is specifically designed to handle standard master board sizes of 18x24, 24x30, 24x36 and 30x36 inches.

- Simpulse cut-off for fast cutting of film roll
- Patented ThermOpulse™ heating system offers impulse system safety
- Adjustable speed vacuum turbine provides precise packaging appearance

Clamco Vacumaster Skin Packaging System

Package faster and more efficiently when you add one of these machines to your packaging line.

LOVESHAW
an TW Company

Little David Case Formers are easily integrated into any production line and can be justified on volumes as low as 500 cases per day. Little David Case Formers are designed to provide all the features found in larger, more costly case erecting packaging machinery.

CF-5 Semi-Automatic Case Former

The Little David CF-5 is a semi-automatic case former designed to fold and hold all bottom flaps of RSC corrugated boxes presented to it by an operator. This machine can be used alone or with a case sealer as part of a packing/sealing station to improve productivity.

- Case dimensions: length 8" to 26-1/2"; width 6" to 20"; height 3-1/2" to infinite
- Produces up to 15 cases per minute
- PLC driven

CF-25 Automatic Case Former with Bottom Tape Cartridge

The CF-25 is an industrial grade, high performance case erector designed to form and bottom-seal corrugated boxes at speeds of up to 15 cases per minute depending on case size and corrugate quality. The CF-25 is ideal for applications that require more throughput than manual case erecting can provide.

- Case dimensions: length 6" to 16"; width 6" to 14"; height 4" to 12"
- Reliable case forming in a compact footprint with no operator needed
- Built for industrial grade, high performance applications that require a small foot print
- Load-on-the-fly: easy load hopper ensures that box loading and changeover are simple and efficient.

CF-50T Automatic Case Former, Folder and Bottom Sealer

The CF-50T expands the Little David line of high performance case formers. This machine was designed to automatically form, fold, and bottom seal RSC corrugated cases - from double wall to recycled material, and can form up to 20 cases per minute.

- Case dimensions: length 7" to 24"; width 6" to 16"; height 4" to 20"
- Produces up to 20 cases per minute, depending on case size and corrugated quality. Standard: 14 cases per minute
- Heavy duty steel construction is designed to endure the most rigorous industrial environments.
- Tool-less changeover features make it easier than ever to switch from one box size to another.

SP-304R BO Semi-Automatic Random Case Former, Bottom Only

The SP-304R BO incorporates an anvil pack table station to provide a table that allows the operator to form the box before sealing the bottom. Random side belt drives positively drive the box through the folding area and over the tape cartridge for a consistent bottom seal. The patent-pending CaseLocker 60 tape cartridge features tool-less quick release wipe rollers and knife blade.

- Case dimensions: length 8" - maximum based on anvil; width 4.5" to 20"; height 3.5" to infinite
- Processes 32 ECT single wall to 44 ECT double wall boxes

Oversized or stainless steel systems are also available.

CF-5 Case Erector (Shown with LD-7 Case Taper)

CF-25 Case Erector with Bottom Tape Cartridge

CF-50T Case Erector with Bottom Tape Cartridge

SP-304R BO Case Former with Tape Cartridge

Printer/Label Applicator

Automatic Top Tape Case Sealer

Case Filler

Case Erector

Many of the machines in this catalog are available with customized options.

Case formers can be easily integrated into any production line.

LOVESHAW
an ITW Company

Loveshaw manufactures a variety of Little David case tapers designed to meet your needs. Models range from semi-automatic to fully automatic and stainless, and are designed to work with uniform or random box sizes.

LD-7 Uniform Case Taper

LD-7 Semi-Automatic Uniform Case Sealer

An economical top and bottom case taper with **bottom belt drive** and a small footprint for sealing large runs of uniform cases, or for those applications that require infrequent case size changes.
- Operating Speed: Continuous belt drive - 80' per minute (24.4m/min)

Case Capacity (with 2" wide CaseLocker ST™ cartridge):
- Length: 4-1/2" (114mm) - infinite
- Width: 4-1/2" (114mm) - 20" (508mm),
- Height: 4-1/2" (114mm) - 24" (610mm)

LD-3SB Uniform Case Taper

LD-3SB Semi-Automatic Uniform Case Sealer

This **side belt drive** case taper is recommended for dimensionally unstable boxes, lightweight boxes and boxes as narrow as 4". Can be used for setting up empty boxes with bottom tape only.
- Uses pressure-sensitive tape
- CaseLocker ST tape cartridge requires no lubrication
- Operating Speed: Continuous belt drive - 72' per minute (18.3m/min)

Case Capacity (with 2" wide CaseLocker ST™ cartridge):
- Length: 4-1/2" (114mm) - infinite
- Width: 4" (102mm) - 20" (508mm)
- Height: 4-1/2" (114mm) - 24" (610mm)

LDX-UTB Uniform Case Taper

LDX-UTB Semi-Automatic Uniform Case Sealer

This **top and bottom belt drive** sealer is designed for processing large runs of the same size box. The LDX-UTB requires manual adjustments to the top drive (for the height of the box) and side rails (for the width of the box).
- Operating Speed: Continuous belt drive - 115' per minute (35.05m/min)

Case Capacity (with 2" or 3" CaseLocker™ 60 cartridges):
- Length: 6" (152mm) - infinite
- Width: 5-1/2" (140mm) - 26" (660mm)
- Height: 3-1/2" (89mm) - 24-1/2" (622mm)

SP-304 Uniform Case Taper

SP-304 Semi-Automatic Uniform Case Sealer

This **extended side belt driven** case taper propels cartons through a folding section, then folds all major flaps and one upper flap. Repetitive motion is reduced and productivity is increased with this innovative design.
- Ergonomic design for operator alleviates twisting motion
- Top and bottom major flap folding
- Operating Speed: Continuous belt drive; 67' per minute (18.3m/min)

Case Capacity (with 2" wide CaseLocker ST™ cartridge):
- Length: 6" (152mm) - 24" (610mm)
- Width: 4-1/2" (114mm) - 20" (508mm)
- Height: 4-1/2" (114mm) - 24" (610mm)

LD-24 Case Taper

Some of the most popular machine tapes that we sell are listed on page 64.

LD-24 Fully Automatic Uniform Case Sealer

This heavy duty fully automatic **top and bottom, side belt drive** case sealer is optimal for large runs of the same size box. Pneumatic flap folding, compact footprint and fully welded base frame makes it one the most reliable and efficient case sealers on the market.
- Capable of running 2" and 3" tape in same machine
- PLC Controlled
- Extensive case capacity: length 6" to 24"; width 6" to 18"; height 4-1/2" to 18"
- Up to 100ft a minute

Case Capacity
- Length: 6" (152mm) - 24" (610mm)
- Width: 6" (152mm) - 18" (457mm)
- Height: 4-1/2" (114mm) - 18" (457mm)

LOVESHAW
an **ITW** Company

UNIFORM CASE TAPING   RANDOM CASE TAPING
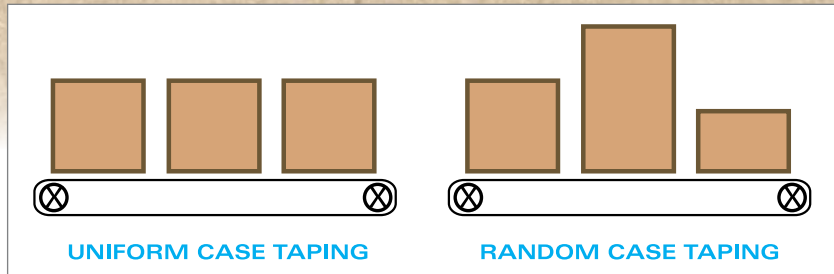
LD-XSS Wash Down Case Sealer

- Heavy duty **bottom belt drive** stainless steel design with continuous TIG welding
- Maximized water shedding to prevent bacterial growth
- Minimal overlapping joints to meet AMI standards for wash down environments
- Operating Speed: Continuous belt drive - 80' per minute (24.4m/min.)

Case Capacity
- Length: 4-1/2" (114mm) - infinite
- Width: 5-1/2" (140mm) - 28" (711mm)
- Height: 4-1/2" (114mm) - 24" (610mm)

LD-XSS Case Sealer

LDX-RTB Semi-Automatic Random Case Sealer

- This **top and bottom belt drive** sealer processes cases between 40% and 80% faster than the competition
- Processes void-filled and overstuffed cases
- Operating Speed: continuous belt drive - standard: 115' per minute (35.05 m/min). High Speed: 155' per minute (47.25 m/min.)

Case Capacity
- Length: 6" (152mm) - infinite,
- Width: 5-1/2" (140mm) - 26" (660.4mm)
- Height: *3-1/2" (90mm) - 24.5" (622mm)
  *Minimum height can be reduced to 2.5" (159mm) with reduced tape tab length

LDX-RTB Case Sealer

Legend Semi-Automatic Random Case Sealer

- **Bottom belt drive** sealer with dual light touch roller switch in pack table for centering and holding box during packing
- Operating Speed: Continuous belt drive - 80' per minute (24.4m/min)

Case Capacity (with 2" wide CaseLocker ST™ cartridge):
- Length: 6-1/2" (165mm) - infinite
- Width: 4-1/2" (114mm) - 20" (508mm)
- Height: 4-1/2" (114mm) - 24" (610mm)

Legend Semi-Automatic Uniform Case Sealer

This **bottom belt drive** unit incorporates a sealed drive, an internally mounted electrical systems and includes the infeed pack table.
- Operating Speed: Continuous belt drive - 80' per minute (24.4m/min)

Case Capacity (with 2" wide CaseLocker ST® cartridge):
- Length: 4-1/2" (114mm) - infinite
- Width: 4-1/2" (114mm) - 22" (559mm)
- Height: 2-5/8" (64mm) - 24" (610mm)

Legend Random Case Sealer

Includes an infeed pack table

Legend Uniform Case Sealer

LD-16R Fully Automatic Random Case Sealer

- **Bottom belt drive** sealer
- Servo controller and PLC controlled, NEMA 12 electrical enclosure
- Operating Speed: Consult factory

Case Capacity
- Length: 10" (254mm) - 36" (914mm)
- Width: 5-1/2" (140mm) - 22" (559mm)
- Height: 6-3/4" (171.45mm) - 30" (762mm)

Both Uniform and Random Case Sealers are available in many of the models shown.

LD-16R Case Sealer

HIGHLIGHT INDUSTRIES, INC.

Magnum 1300 TB-U Case Sealer

Magnum 1300 TB-U Uniform Semi-Automatic Case Sealer

The Magnum 1300 TB-U utilizes **dual top and bottom belt drives** to provide the best performance for cases that are overstuffed or tall and unstable, where side belt drive systems are less suitable. The machine can be adjusted quickly for different box sizes using a crank handle and two locking knobs.

- Easy manual adjustment for uniform case dimensions up to 20"W x 20"H
- Operates up to 30 cases per minute
- Two 2" tape heads with easy threading (3" optional)
- Includes 16-inch long infeed and exit conveyors and Case Top Squeezer Rollers
- Height adjustable legs from 23" to 32" with locking casters

Magnum 2300 SD-U Case Sealer

Magnum 2300 SD-U Uniform Semi-Automatic Case Sealer

The Magnum 2300 SD-U utilizes **dual side belt drives** that provide the best performance for uniform case sealing application, including challenging narrow or long length boxes. The opposing side belts create optimum grip in the case and allow for productivity-improving upgrades such as flap folding options. A simple turn of the crank handles quickly adjusts the machine for different box sizes.

- Easy manual adjustment for uniform case dimensions up to 20"W x 20"H
- Operates up to 30 cases per minute
- Two 2" tape heads with easy threading (3" optional)
- Includes 16-inch long infeed and exit conveyors and Case Top Squeezer Rollers
- Height adjustable legs from 23" to 32" with locking casters

Magnum 700 shown with pusher and Magnum 2300 case sealer with additional flap folder option

Magnum 3000 Case Packing Station

Magnum CFPS 700 Semi-Automatic Case Erector

The Highlight Magnum CFPS 700 is a semi-automatic bottom flap forming machine and packing station. Designed to increase productivity and reduce worker strain, the machine will fold all four bottom flaps and hold a case securely for packing on the unit.

- Interfaces with any carton sealer
- Accepts large range of case sizes
- All pneumatic operation

A single operator can do the work of three!

Magnum 3000 Case Packing Station

Combines the CFPS 700 and Magnum 2300, allowing a single operator to easily achieve a production rate of up to 15 cases per minute.

Magnum 3500 TB-R Case Sealer

Magnum 3500 TB-R Random Semi-Automatic Case Sealer

The Magnum 3500 TB-R utilizes **dual top and bottom belt drives** that provide the best performance for cases that are overstuffed or tall and unstable, where side belt drive systems are less suitable. The machine automatically adjusts in height and width according to box size. Three operation modes are standard: Random, Fast Random, and Uniform.

- Automatically adjusts to random case dimensions up to 20"W x 20"H
- PLC Control with three modes: Random, Fast Random, and Uniform
- Up to 12 cases per minute in Random mode and 30 cases per minute in Uniform mode
- High speed option available for up to 18 random cases per minute
- Two 2" tape heads with easy threading. 3" optional
- Height adjustable legs from 27" to 35" with locking casters

Integrate a case erector and case sealer into your packing station for maximum efficiency.

HIGHLIGHT INDUSTRIES, INC.

Magnum 4500 SD-R Random Semi-Automatic Case Sealer

The Magnum 4500 SD-R utilizes **dual side belt drives** that provide the best performance for random case sealing applications, including challenging narrow or long length boxes. The machine automatically adjusts in height and width according to the box size. Three operation modes are standard: Random, Fast Random, and Uniform.

- Automatically adjusts to random case dimensions up to 24"W x 24"H
- PLC Control with three modes: Random, Fast Random, and Uniform
- Up to 15 cases per minute in Random mode and 30 cases per minute in Uniform mode
- High speed option available for up to 20 random cases per minute
- Two 2" tape heads with easy threading (3" optional)
- Height adjustable legs from 27" to 35" with locking casters

Magnum 4500 SD-R Case Sealer

Magnum 5850 SD-U FF Uniform Fully Automatic Case Sealer

The Magnum 5850 SD-U FF is an **adjustable side belt drive** case sealer designed to automatically fold the flaps and provide accurate and consistent tape application to uniform cases. Highlight's 200 Series tape head will accept any 2" case tape and provide optimum case sealing to the top and bottom of the case. The system is designed to operate at up to 26 cases per minute. An optional 3" tape head, Model 300, is also available and interchangeable with the model 200. Entry and exit conveyors are optional. Height-adjustable legs from 27" to 35" with locking casters included.

- Automatically folds flaps for uniform cases
- Indexing gate for automatic operation up to 26 cases per minute
- Two 2" tape heads with easy tap threading (3" optional)
- Adjustable flap folding arms
- Adjustable legs from 27" to 35" with locking casters
- Two safety doors with safety switches
- Options available: infeed and exit conveyors, tape sensing, high speed

Magnum 5850 SD-U FF Case Sealer

Magnum Precision Tape Head

- Easy tape threading with open side plate
- Heavy gauge steel for strength and long life
- Tape Width: 1-1/2" to 2" (200) and 3" (300) – interchangeable only on the side belt drive Highlight MAGNUM case tapers
- Tape Roll Diameter: up to 16" maximum on a 3" diameter core
- Tape Application Leg Length: adjustable from 1-1/2" to 2-3/4"
- Operating Rate: conveyor speeds up to 125' per minute
- Retro fit tape head kits to upgrade other carton sealers
- For use with all pressure sensitive film box sealing tapes

Adjustable unwind and roll centering for maximum tape performance

Tape silencer reduces noise and ensures consistent tape unwind

Main spring is adjustable for applying roller tension

Tape tension is precisely controlled with one way brass knurled roller

Maintenance-free lubricated bushings

Wipe down brush for better tape adhesion to the carton

Tape folding wheel and guide bracket enhance tape travel

Blade guard provides maximum safety

Tape leg lengths can be adjusted from 1-1/2" to 2-3/4" for proper coverage on carton

Rubber rollers deliver superior tape wipe down to the front and rear of the carton

Magnum Precision Tape Head

Water Activated Tape Machines

Water activated tape machines offer the convenience of easily-dispensed packaging tape in an easy-to-manage counter-top size. Electric models give you programmable size presets. Manual models give you the flexibility to station the machine anywhere in your facility without worrying about proximity to an electrical outlet.

Better Pack 555e Series Tape Dispenser

Better Pack® 555e Series Electric Water-Activated Tape Dispenser

The Better Pack 555e Series electronic water activated tape dispensers offer the most options and the highest level of automation available. Several models are available to fit your packing specifications and accessories and replacement parts are available.

- Fast tape output of 45" per second and user-friendly, color-coded keypad with 14 preset length buttons make dispensing and sealing quick and easy
- Maximum roll size up to 10" diameter (25cm); 1,000' tape roll capacity means fewer changeovers, less downtime
- Automatic tape advance feature (standard on most models) is perfect for high-volume, fixed size carton sealing
- 1,000 foot roll tape capacity means fewer changeovers, less downtime
- Foot pedal and tape aerial accessories further improve worker efficiency

Better Pack 333 Plus Tape Dispenser

Better Pack® 333 Plus Manual Tape Dispenser

The Better Pack 333 is a rugged, reliable, simple-to-use manual water-activated tape dispenser - perfect for any application on a light to medium-volume packing line. Without the need for electricity, the dispenser is easy to move from one packing line to another. Replacement parts are available.

- Dispenses up to 30" (76cm) of tape with one stroke - more with multiple strokes
- Handles both reinforced and non-reinforced paper tapes - from 1-1/2" to 3" wide (4-7cm)
- 15 preset tape lengths measured in inches on a dial

Refer to page 68 for information on the MSSC/ Marsh Stencil Machines and Supplies!

Water Activated Gummed Tape

Available in a wide variety of sizes and product construction, reinforced water activated gummed tapes are designed to provide consistent performance in carton sealing applications where durability, extra strength and reliability are required. Extra strong fiberglass yarns are bonded between the high tensile strength sheets for an extra margin of strength. Water activated gummed tapes are also available non-reinforced and both types bond instantly to corrugated cartons and paper and the immediate destructive bond results in a tamper-evident package.

DESCRIPTION/SIZE	CTN CT
Non-reinforced Medium Duty – Natural/White	
Natural 2-1/2" x 600', with core (60mm x 183m)	12
Natural 3" x 600', with core (72mm x 183m)	10
Reinforced – Natural/White	
Natural 70mm x 375', coreless (115m)	8
Natural 70mm x 450', coreless (138m)	10
Natural 70mm x 600', coreless (183m)	10
White 72mm x 450', with core (138m)	10
Natural 72mm x 450', with core (138m)	10
Natural 3" x 450', heavy duty (138m)	10

Both natural and white tapes are available in many sizes for the WAT machines shown.

MSSC TD2100 Electric Tape Machine

Marsh TD2100 Electric and Manual Tape Machines

- Accommodates up to 1000 foot (305 meter) tape roll; max roll diameter is 9" (222.6mm)
- The "Apex" design guillotine style cutter, made of 420HC stainless steel offers long life and requires very little cleaning and adjustment
- 70 oz. water bottle increases production up time with fewer refills; largest bottle in the industry
- Wide track 1.5" feed roll and pinch roll using a high coefficient of friction urethane to ensure accurate and quiet tape feed through

The **TD2100 (TDE)** electric version has three variations to meet your specific carton closure needs: standard, premium short, and premium long.

- Standard models offer 10 pre-set selectable lengths from 5" to 99"
- Premium models not only offer 10 pre-set selectable lengths, but with the use of the "NUM LOCK" key provides option to input custom lengths ranging from 5" to 99" in 1" increments.
- Electric model features tactile keypad with LCD display for easy adjustment of tape length

The **TD2100 (TDH)** manual version comes in 4 models, with the choice of inch or metric scale and an optional 110V or 220V heater.

- Manual model features easy-pull handle to adjust for various tape lengths; can be adjusted from 5" to 36" in just a single pull (longer lengths can be set with an additional pull)

MSSC TD2100 Manual Tape Machine

Reinforced water activated tapes dispense extra strength and durability in carton sealing.

BOSTITCH

SENCO

ISP Stitching & Bindery Products
A Division Of Samuel Strapping Systems

JK JOSEF KIHLBERG

ISP HF16P Regular Duty Post-Type Silverstitcher

Post-type stitcher for setting up regular slotted boxes, overlap slotted boxes, full overlap boxes or half-slotted boxes with partial covers. For bottom closure of boxes.

- Closes bottoms of slotted boxes quickly and securely, meets carrier regulations
- Maximum size box (including top flaps): 32" wide x 41-1/4" deep
- 16" from front of frame to clincher; 41-1/2" from top of base to clincher
- Produces over 3000 boxes a day; up to 350 RSC boxes an hour

Choose from a wide range of galvanized or copper wire sizes to use in stitching machines from ISP, Bostitch and others.

Stitching Wire

DESCRIPTION/SIZE	GAUGE	ITEM CODE	DESCRIPTION/SIZE	GAUGE	ITEM CODE
Galvanized, 10# Coil	.020	103X020-10G-ISM	Copper, 10# Coil	.020	103X020-10C-ISM
Galvanized, 25# Coil	.020	103X020-25G-ISM	Copper, 25# Coil	.020	103X020-25C-ISM
Galvanized, 25# Coil	.023	103X023-25G-ISM	Copper, 25# Coil	.023	103X023-25C-ISM
Galvanized, 25# Coil	.028	103X028-25G-ISM	Copper, 25# Coil	.028	103X028-25C-ISM

ISP HF16P Post-Type Silverstitcher

Bostitch FC95EC Electric Anvil Post Carton Closing Stapler

Post-type stapler for high volume carton bottom closing of regular slotted cartons.

- 24" throat and 40" anvil post height allows most cartons to be stapled in one motion without reversing carton direction
- 180 staples per minute average speed; maximum coil 4000 staples

Roll Staples

DESCRIPTION/SIZE	CTN CT	ITEM CODE	WIRE SIZE
1-3/8" Crown x 1/2" Leg	24000	SWC7437-12	.074" x .037"
1-3/8" Crown x 5/8" Leg	24000	SWC7437-58	.074" x .037"
1-3/8" Crown x 3/4" Leg	24000	SWC7437-34	.074" x .037"

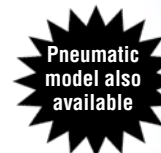**Bostitch FC95EC Carton Closing Stapler**

Bostitch F84-138 - Foot Operated Bottomer

Makes up ready-to-fill cartons. Standard "post-type", manual or pneumatic staplers; side arm models also available. Rugged construction for manual production line use. Uses standard 5/8", 3/4" or 7/8" leg staples. 1-1/4" or 1-3/8" crown.

- Short, ergonomic foot pedal designed for speed and easy actuation
- F84-138 comes with an interchangeable plate for driving either SW7437 or SW9040 staples

Stick Staples

DESCRIPTION/SIZE	CTN CT	ITEM CODE	WIRE SIZE
1-3/8" Crown x 5/8" Leg	2000	SW7437-58	.074" x .037"
1-3/8" Crown x 3/4" Leg	2000	SW7437-34	.074" x .037"
1-3/8" Crown x 5/8" Leg	2500	SW9040-58	.090" x .040"
1-3/8" Crown x 3/4" Leg	2000	SW9040-34	.090" x .040"
1-3/8" Crown x 7/8" Leg	2000	SW9040-78	.090" x .040

Pneumatic model also available

Many other sizes of stitching wire and staples are available.

Bostitch F84-138 Carton Closing Stapler

Long Reach Carton Closing Staplers

Long reach carton closing staplers allow flexibility of staple placement and limit interference from obstacles such as box flanges. Applications include fastening corrugated containers, vegetable tray boxes, end caps, pallet boxes, container inserts, die cut inserts, and stapling of fabric. *Models available from Senco, Bostitch, Josef Kihlberg and others.*

For use in staplers from Bostitch, Josef Kihlberg, Senco and others.

Long Reach Carton Closing Staplers

Galvanized Plier Staples for Clinch Type and Long Reach Staplers

DESCRIPTION/SIZE	GAUGE	CTN CT
1/2" Crown x 5/16" Leg	20	24000
1/2" Crown x 3/8" Leg	20	10000
1/2" Crown x 1/2" Leg	20	10000
7/16" Crown x 3/8" Leg	18	5000
7/16" Crown x 1/2" Leg	18	5000
7/16" Crown x 5/8" Leg	18	5000

Correct method for basic box stapling

- Crown width must be at least 1-1/4 inches
- Do not space staples more than 5 inches apart along both the center seam and the sides of the outside flaps of a regular slotted container but only where the outer flaps overlap the inner flaps.

Which staple is right for this application?

- 1/2 inch leg – 125 and 175 lb. test single wall
- 5/8 inch leg – most single wall corrugate
- 3/4 inch leg – most double wall corrugate
- 7/8 inch leg – heavy double and triple wall especially in manual applications where board "memory" is difficult to overcome

Carton Closing Staplers and Staples

There are many benefits of using staples versus other carton closure methods. Staples are environmentally safe; they can be recycled or land filled without problems. Roll staples reduce loading time and increase production output. Staple closure is instantaneous with visual confirmation. Staples "lock" flaps together providing maximum holding strength. Staple strength and security exceeds shipping and handling requirements, and staple closures are unaffected by extremes of temperature and humidity.

Roll Box Stapler

Pneumatic operated tool for use on moderate volume packaging lines; 1000 staples per coil roll for high speed production box stapling. These light-weight tools can close up to 250 cartons without stopping to reload. Uses 5/8" or 3/4" leg staples, 1-1/4" crown.

Roll Box Stapler

Air Box Stapler

Pneumatic operated tool utilizes pre-formed stick staples for use on low to moderate volume packaging lines or where carton design requires staples to be inserted at an awkward position. High production carton make-ready or carton closing stapler is used to staple light or heavy 350# cartons. Five models available:

AB150-C58 uses 5/8" leg, 1-1/4" crown (C-58)   AB100-A58 uses 5/8" leg, 1-3/8" crown (A-58)
AB150-C34 uses 3/4" leg, 1-1/4" crown (C-34)   AB100-A34 uses 3/4" leg, 1-3/8" crown (A-34)
                                                                                AB100-A78 uses 7/8" leg, 1-3/8" crown (A-78)

Air Box Stapler

Hand Box Stapler

Hand operated tool uses pre-formed stick staples for use on low volume packaging lines or warehouse applications where compressed air is not readily available. Built-in auxiliary handle permits easy carrying and insures consistent and reliable hand stapling. Closes filled cartons from the outside. Three models available:

HB150-C58 uses 5/8" leg, 1-1/4" crown (C-58)   HB100-A58 uses 5/8" leg, 1-3/8" crown (A-58)
HB150-C34 uses 3/4" leg, 1-1/4" crown (C-34)   HB100-A34 uses 3/4" leg, 1-3/8" crown (A-34)
                                                                                HB100-A78 uses 7/8" leg, 1-3/8" crown (A-78)

Hand Box Stapler

Carton Closing Staples

Staples have many advantages over other carton closing methods like tape and glue, including superior strength and security. While a taped box can easily be sliced open and its contents pilfered, a stapled box is much tougher to open.

Staples listed are for use in foot bottom box staplers, roll box staplers, air box staplers and hand box staplers from Interchange, Bostitch, ISM, Josef Kihlberg and others.

Stick Staples

DESCRIPTION/SIZE	CTN CT	ITEM CODE
1-1/4" Crown x 5/8" Leg	2500	C58
1-1/4" Crown x 3/4" Leg	2000	C34
1-3/8" Crown x 5/8" Leg	2500	A58
1-3/8" Crown x 3/4" Leg	2000	A34
1-3/8" Crown x 7/8" Leg	2000	A78
1-3/8" Crown x 5/8" Leg	2000	SW7437-58
1-3/8" Crown x 5/8" Leg	2500	SW9040-58
1-3/8" Crown x 3/4" Leg	2000	SW7437-34
1-3/8" Crown x 3/4" Leg	2000	SW9040-34
1-3/8" Crown x 7/8" Leg	2000	SW9040-78

Roll Staples

DESCRIPTION/SIZE	CTN CT	ITEM CODE
1-1/4" Crown x 5/8" Leg	24000	GR158
1-1/4" Crown x 5/8" Leg	30000	GR558
1-1/4" Crown x 3/4" Leg	24000	GR134
1-1/4" Crown x 3/4" Leg	30000	GR534
1-11/32" Crown x 5/8" Leg	24000	SWC7437-58

Staples "lock" flaps together providing maximum holding strength.

Ensure that your labels are securely applied to products, packages, and pallets, and your edge is glued as desired. Whether you are shipping product across departments or across state borders, you can rest assured that our edge and label gluers will thoroughly apply the required adhesive so your label stays put for the extent of the trip, until it reaches its destination, and beyond.

Gluefast
Adhesives & Applicating Equipment

Standard Edge Gluer

The Standard Edge Gluer glues the bottom edge of an item; available in two models.
- Model #2 features a gluing range from 1/4" to 2-1/4"; roller speed of 69-163 ft/minute; feed table 4.9" x 10.5"; and 16 oz. liquid glue capacity.
- Model #4 features a gluing range from 1/4" to 3-1/2"; roller speed of 69-163 ft/minute; feed table 5.9" x 10.5"; and 24 oz. liquid glue capacity.

Label-Pro® 5.5 Manual or Electric Label Gluer

The Label Pro 5.5 is available in manual or electric models. The **manual model** starts when the operator places the label in position and pushes a black rubber feed roller to run the label through the equipment, whereas, the **electric model** starts automatically when the operator feeds the label into the gluer.
- The electric Label Pro 5.5 is available with a 120 or 220 volt motor
- The standard Label-Pro applies a corduroy pattern of glue to the back of the label.
- Thin film with no glue oozing from the edge of the label
- Both models' max label width is 5-1/2"

Standard Edge Gluer

Captain B Electric Label Gluer

The Captain B labeling and gluing machine is available with 8", 10", and 14" roller widths.
- Excellent speed and glue control
- Oversized models are available

Captain B Electric Label Gluer

LabelPro 5.5 Manual or Electric Label Gluer

Palletizing Adhesives

SKID-LOCK, a water-based adhesive, is applied on top of each item before being palletized. The packages are then placed on the pallet or slip-sheet where a unique adhesive bond forms that is high in shear strength (to hold during the side-to-side motion encountered during transportation) and low in tensile strength (up and down movement). When the customer receives the pallet, they simply pick the package up to break the bond cleanly with no damage to the packaging.

SKID-LOCK® Palletizing Adhesive Applicator Systems

SKID-LOCK offers an economical and ecological alternative for securing pallets.
- Complete system includes: spray arm assembly, application station and pumping station

SLUSB Automatic Applicator
- Applies SKID-LOCK onto each item when detected by two photo-electric eyes
- Automatically adjusts for changes in the length of the items palletized

LC Automatic Applicator
- The best basic, entry level system available
- Single photo-electric eye accurately detects most items

LC Automatic Applicator

P.A.T. Manual Applicators

Standard P.A.T.

P.A.T. with Pistol Grip Sprayer

P.A.T. Sprayer

P.A.T. Manual Applicator

Three P.A.T. (Pneumatic Adhesive Tank) systems are available. Each P.A.T. is available in 3, 5, or 10 gallon sizes and features gauge and regulators, a safety relief valve and a glue line and applicator valve.
- **Standard P.A.T.** Uses interchangeable glue heads: extrusion glue head applies solid lines, while the spray head sprays product in a larger "fan" pattern
- **P.A.T. with Pistol Grip Sprayer** Comfortable hand-held device
- **P.A.T. Sprayer** Best control for manually spraying SKID-LOCK

SKID-LOCK Adhesive

SKID-LOCK is a water based resin product with a key ingredient that prevents deep penetration of the resin into paper or board stock. The resulting surface bond provides the ideal properties required for a true unitizing adhesive...high shear strength (side to side) and low tensile strength (up and down).

For the best results, apply using one of our adhesive applicators: P.A.T. manual applicators, the LC Auto Applicator, or the SLUSB-120 Auto Applicator.

DESCRIPTION	ITEM CODE
5 Gallon size	SKID-LOCK+5GAL

Ink Jet Printers - Dot Matrix and Fluids

LOVESHAW
an ITW Company

Loveshaw MicroJet III Ink Jet Printer

MicroJet I Ink Jet Print Sample

MicroJet® I Ink Jet Printer
Prints one line of 11/32" (5 x 5 dot matrix) high print. Ideal for product or date code identification on porous surfaces, such as corrugated containers.

MicroJet I Plus Ink Jet Print Sample

MicroJet® I Plus Ink Jet Printer
Prints one line of 3/8" to 2" (5 x 7 dot matrix) high print. Perfect for large characters on porous surfaces.

MicroJet® II Ink Jet Printer
Prints one or two lines of 7/16" (5 x 5 dot matrix) high print. One line of 5/8" (5 x 7 dot matrix) high print. One line of 15/16" (5 x 11 dot matrix) high print. Perfect for porous printing jobs that require lots of information in a small amount of space.

MicroJet II Ink Jet Print Sample

MicroJet® III Ink Jet Printer
Same as the Multi II, plus an extra line of 7/16" (5 x 5 dot matrix) printed in any combination. Multiple fonts are what the Multi III is all about. Perfect for porous printing jobs that require three lines of print in a limited amount of space

MicroJet III Ink Jet Print Sample

5-Dot (5x5) Printing   11-Dot (11x7) Printing

7-Dot (7x5) Printing   11-Dot (11x7) 3-Line Printing

Dot Matrix Print Samples

 Citronix Codes Of Excellence

 LOVESHAW *an ITW Company*

 MSSC

Inks and fluids available for the following systems:

Citronix	*Marsh*
Diagraph	*Matthews*
Domino	*Squibb*
Hitachi	*and more!*
Loveshaw	

Ink Jet Fluids
Refill your ink jet printer system with top-quality inks that deliver sharp barcodes and text messages.

High Resolution Inks for Bar Coding - These inks achieve excellent bar code readability while maintaining machine friendly reliability.

Large Character Ink Jet Ink - These inks have been designed to deliver optimum performance utilizing the finest dyes and raw materials all filtered to sub micron particle size to insure printer friendly prints. Inks for both porous and non-porous surfaces are available.

CIJ Continuous Ink Jet Small Character Printing Variable data such as barcodes and traceability codes are printed onto products in industries including: automotive, food, beverage, electronic, consumer products, wire/cable, mailing systems and pharmaceuticals.

Listed below are the most popular items that we sell.

DESCRIPTION	COLOR	SIZE
Hi-Res Ink	Black	16.7oz
Porous	Black	1 Liter
Porous Ink - Bulk	Black	5 Gallon
Porous	Red	1 Liter
Nonporous	Black	1 Liter
Ink: Video Jet Series 2000		
Ink Cartridge for Anser - Bulk		
Ink Cartridge for Anser, Evolution 1 and Evolution SC		
Ink Jet Hand Cleaner		

Supplies for the ink jet printers are available for these and other systems.

LOVESHAW an *ITW* Company   **Citronix** Codes Of Excellence   **digital design inc.**   **LEIBINGER**

High Resolution Printing using HP Ink Cartridge Technology:
Bar Codes and Logos can be printed with these systems.

Loveshaw MicroJet HRP Thermal Jet Printer

The HRP printhead is constructed of an enclosed, industrial-grade housing with stainless steel faceplate and built-in photo sensors to detect product speed and direction.
The MicroJet HRP 1/2" is designed for one and two line marking/coding applications.
The MicroJet HRP 1" is capable of printing up to 10 lines of data including alphanumerics, logos and UPC-A bar codes onto porous or non-porous surfaces.

- Variable Character Heights: Prints up to 10 lines of print- 1/10", 1/4", 1/2", or 1" (2.54mm, 6.35mm, 12.7mm, or 25.4mm) tall
- Print Resolution: 300 dpi vertical resolution
- Print Speed: Up to 200 fpm (up to 61 mps)

Loveshaw HRP

Digital Design Evolution SC™ Small Character Ink Jet Printer

A non-porous small character ink jet printer designed to print a lot number, expiration date or other product identification directly onto the primary product as it travels on the production line. Three distinct character heights, with bold characters available for the two large sizes. The Evolution SC is powered by Hewlett-Packard thermal ink jet cartridge technology.
Sizes available for selection via the keypad are 5x5, 7x5, 7x5 BOLD, 12x9 and 12x9 BOLD.

DOT MATRIX	CHARACTERS	MESSAGES/CARTRIDGE*
5 x 5	8,000,000	800,000
7 x 5	5,650,000	565,000
7 x 5 Bold	2,668,000	266,800
12 x 9	3,694,000	369,400
12 x 9 Bold	1,921,000	192,100

* Based on a typical 10 digit message.

Supplies are available for these and other Ink Jet Printer systems.

For Printing on Porous and Non-Porous Surfaces!

Evolution SC Ink Jet Printer

Citronix ci Series (Continuous Ink Jet) Ink Jet Printer

Citronix printers offer a non-contact way to code your products, whether plastic, metal, paper, wood, glass or other substrate type, with one to five lines of high quality text, graphics and bar codes at very high speeds. Specialty printers available for: micro, heavy pigment, food grade, HS50, pigment and security.

The ciSeries standard printers are:

- ci580: for typical 1 or 2 line printing applications.

- ci700: mid-range printer designed to meet 1 to 3 line printing applications; available with wider range of connectivity options.

- ci1000: advanced printer with capability to print up to 5 lines of text, graphics and bar codes. Includes advanced connectivity features such as ciLink.

- ci2000: designed for harsh environments, this IP65 rated printer includes all the features and capabilities of the ci1000.

Citronix CI Series Ink Jet Printer

Leibinger Jet3 Small Character Inkjet Printer

The Jet3 offers a comfortable operation based on Windows CE Technologie® using a 10,4" color TFT touch display. Large keys and menu navigation in different languages as well as endless numbers of special functions like graphic and font editor make the handling extremely easy. The refill system guarantees a clean, splash-free and smell-free refilling process.

Leibinger Jet3 Ink Jet Printer

Ink Jet Print Samples

Ink jet printers can apply identifying marks to almost any kind of material.

Desktop Label Printers

The perfect printers for applications when a single label needs to be printed and manually applied: retail point of sale and product marking, shelf labeling, inventory and asset management, healthcare specimen labeling, patient tracking, pharmacy/prescription labeling, and more. Common features include:

- Thermal Transfer models use a ribbon to transfer the printed image to the label.
- Direct Thermal models do not have a ribbon and print directly to the label.
- Plug-and-play with your desktop computer, with software control over the printer.
- High resolution printhead on certain models enables high quality, crisp, clear printing for labeling applications that require data such as two-dimensional bar codes, fine text, or composite graphics.
- RFID-Ready models can encode data onto Radio Frequency (RF) chips embedded into a label (also known as a smart label) creating a powerful Radio Frequency Identification (RFID) label.

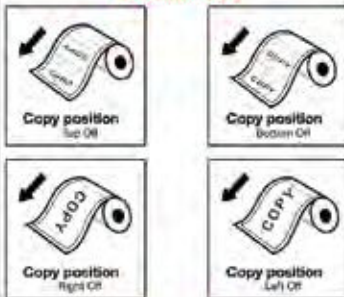**Sato CL608e Thermal Transfer**

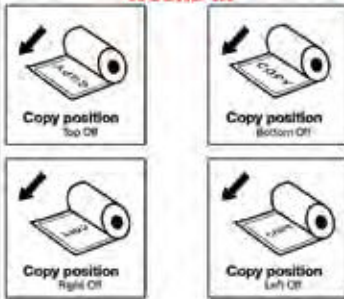**Datamax I Class MarkII**

Zebra 110Xi4

Zebra TLP 2824 Plus

Zebra GX430t

Label Copy Position Chart
WOUND OUT

Copy position Top Off
Copy position Bottom Off
Copy position Right Off
Copy position Left Off

WOUND IN

Copy position Top Off
Copy position Bottom Off
Copy position Right Off
Copy position Left Off

> These are just a few of the label printers we have available. Ask your Account Manager for more information!

Sato CL408e Direct Thermal

TEC CB-416-T3B

Prolong the life of your printhead with Clean Start®

There's an easy, convenient way to maintain your printhead and print quality. It's called Clean Start and it's built in at the beginning of the wax and wax/resin thermal transfer ribbons. Patent pending Clean Start printhead cleaner removes debris before it builds up on the printhead so variable images are always clear, consistent and highly readable.

Easy to use - no printer adjustments needed!

Thermal and Direct Thermal Printers

Thermal printers are designed to print very high quality labels with or without bar codes and as few as one label at a time or very large batches of labels.

There are two general types of thermal printers: Direct Thermal and Thermal Transfer. Like conventional FAX machines, **direct thermal printers** image the paper directly, using no ribbon, while **thermal transfer printers** use a temperature sensitive inked ribbon that transfers ink to the paper or synthetic label material when heated.

Direct thermal printers use a thermal printhead that applies heat to a chemically treated paper that turns dark as a result of the heat thus creating lines, text and graphics. Direct thermal printing produces a tag or label that fades with age and will turn black if exposed to heat or strong sunlight. Many restaurant and grocery store receipts are direct thermal technology.

Thermal transfer printers use the same thermal printheads as direct thermal printers, but heat is applied to a ribbon which transfers the image to a substrate (label or tag) creating lines, text and graphics. There are more choices of face materials available with thermal transfer printing.

Labels also come in two main types: direct thermal and thermal transfer. A huge variety of specialty materials and adhesives are available to suit most applications.

We can help you find the perfect printer for your application needs.

Direct Thermal Labels

Heat sensitive labels require no ribbon for printing!

- Bright white coated face stock
- Creates sharp, readable barcodes with excellent image density

SIZE	LABELS/ROLL	ROLLS/CASE
2-1/4" X 1-1/4"	5087	4
3" x 2"	2750	6
3" x 4"	1400	6
3" x 5"	1100	6
3-1/2" x 8"	750	4
4" x 1"	5560	4
4" x 2"	3000	4
4" x 3"	2000	4
4" x 4"	1500	4
4" x 6"	1000	4
4" x 6-1/2"	900	4

Fanfold Thermal Transfer Labels

- Bright white, matte coated face stock
- Permanent pressure sensitive adhesive
- Liner is perforated between each label

SIZE	LABELS/STACK	STACKS/CASE
4" x 6"	2,500	2

Listed are some of the most requested labels and ribbons. Ask your Account Manager about other options!

Thermal Transfer Labels

Recommended for product identification, shipping labels and most packaging applications!

Thermal transfer technology utilizes a ribbon and matching labelstock material to transfer an image onto the label material. Available in perforated and non-perforated. White is standard but some sizes are available in colors.

SIZE	LABELS/ROLL	ROLLS/CASE
2" x 1"	5100	8
2" x 1 - 2 up"	10200	4
2" x 1.5"	3500	8
2" x 1.5 - 2 up"	7000	4
2" x 2"	2750	8
2" x 3"	1800	8
3" x 2"	2750	6
3" x 3"	1800	6
3" x 4"	1400	6
3" x 5"	1100	6
3.5" x 8"	750	4
4" x 2"	2750	4
4" x 3"	2000	4
4" x 4"	1400	4
4" x 5"	2000	4
4" x 6"	1000	4
4.25" x 7"	900	4
5" x 3"	1800	4
5" x 4"	1500	4
6" x 4"	1500	4

Also available in floodcoated colors:
blue, green, orange, pink, red, yellow, purple and dark green.

Thermal Transfer Ribbons

For use with thermal transfer labels on Zebra, Datamax, Sato and other printers!

Printhead Saver® and anti-static back coating is designed to extend the life of thermal print-heads. Ribbon performance characteristics allow printing at lower temperatures and faster speeds, resulting in reduced printhead costs and lower overall energy usage.

DESCRIPTION	SIZE
Wax	1.57" x 1476' (40mm x 450m)
Wax	2.36" x 984' (60mm x 300m)
Wax	2.36" x 1476' (60mm x 450m)
Wax	2.52" x 1476' (64mm x 450m)
Wax	3.14" x 984' (80mm x 300m)
Wax	3.14" x 1476' (80mm x 450m)
Wax	3.27" x 1476' (83mm x 450m)
Wax	3.54" x 1476' (90mm x 450m)
Wax	4.02" x 984' (102mm x 300m)
Wax	4.02" x 1476' (102mm x 450m)
Wax	4.33" x 984' (110mm x 300m)
Wax	4.33" x 1476' (110mm x 450m)
Wax	4.50" x 1181' (114mm x 360m)
Wax	5.12" x 984' (130mm x 300m)
Wax	5.12" x 1476' (130mm x 450m)
Wax	6.02" x 1476' (153mm x 450m)
Wax	6.50" x 984' (165mm x 300m)
Wax	6.50" x 1476' (165mm x 450m)
Wax	7.09" x 1476' (180mm x 450m)
Wax	8.66" x 2461' (220mm x 625m)
Resin	4.02" x 1181' (102mm x 360m)
Resin	4.33" x 1476' (110mm x 450m)
Wax/Resin	2.09" x 1181' (53mm x 360m)
Wax/Resin	3.00" x 1181' (76mm x 360m)
Wax/Resin	3.14" x 1476' (80mm x 450m)
Wax/Resin	3.15" x 984' (80mm x 300m)
Wax/Resin	3.54" x 1476' (90mm x 450m)
Wax/Resin	4.02" x 1181' (102mm x 360m)
Wax/Resin	4.33" x 984' (110mm x 300m)
Wax/Resin	4.33" x 1181' (110mm x 360m)
Wax/Resin	4.33" x 1476' (110mm x 450m)
Wax/Resin	5.12" x 1476' (130mm x 450m)
Wax/Resin	6.50" x 1476' (165mm x 450m)
Wax/Resin	8.66" x 1476' (220mm x 450m)

Wax, Wax/Resin and Resin Thermal Transfer Ribbons

The ribbon acts as a buffer between the substrate and the printhead, extending the printhead life. For this reason, the ribbon should always be wider than the width of the tag or label. Thermal transfer ribbons come in three main types:

- **Wax:** Delivers dark, high-definition, rotated and non-rotated barcodes, text, logos and symbols. Durable and smudge resistant. Recommended for shipping labels, carton labeling and retail bags. Wax ribbons are for printing onto paper labels, where the life of the label can be years but must be kept dry and must not be subjected to certain chemicals or oil, which would melt the wax image.

- **Wax/Resin:** Delivers high-definition images at lower print temperatures. Increased resin makes labels more resistant to smearing and scratching. Wax/resin ribbons produce a finer image on very smooth paper or coated paper labels. The printed image is much more durable than wax, but can still only stand slight contact with water.

- **Resin:** Versatile resin ribbons are formulated to print onto a wide variety of labels from mid range synthetics to high end films. Scratch, abrasion, chemical and heat resistant. Prints sharp, dark images at moderate print temperatures.

Thermal transfer labels are recommended for product identification, shipping labels and packaging applications.

Loveshaw LX-80 Print and Apply Label Applicator

Loveshaw LX-500P Label Applicator

Many other models are available!

Loveshaw LX-80 Print and Apply Label Applicator

The LX-80 features a simplified control panel, and set-up procedure which allows the user to take the system from pallet to production in less than ten minutes. The LX-80 utilizes a completely redesigned stand and mounting orientation which gives its users the versatility they require - with high quality features such as stainless steel blow tubes, and automatic stroke control.

Loveshaw LX-800-DT Print and Apply Label Applicator

Designed for integration into automatic print/apply labeling applications, this easy to use labeler is designed for dual tamp, single tamp, and corner wrap applications.

Loveshaw LX-500P Label Applicator

The easy to use LX-500P is a compact label applicator that can be oriented for top, side or bottom labeling. It is built around a brushless DC Servo motor for accurate and dependable label dispensing. For use in applications that require maximum uptime and high repeatability.

Loveshaw LS-600 Automatic Label Applicator

The LS-600 allows for the use of various applicator options. When applying labels on pallets or runs of various dimensional cases/products, this system is a reliable labeler for industrial environments and applies pre-printed labels and precisely positions them on boxes, pallets or products.
- Dual Tamp available

Loveshaw LX-800-DT Print and Apply Label Applicator

Loveshaw LS-600 Label Applicator

Label Mill 5000RPS Label Applicator

Label Mill 5000RPS Round Product Label Applicator

The Label Mill 5000RPS High Speed Wrap Around bottle labeler was specifically designed for the bottling industry. Built to handle almost any cylindrical glass or plastic container, as well as almost any other cylindrical product, the 5000RPS' standard features are designed to accurately apply full wrap, partial wrap, or front and back labeling at high speeds. Its compact footprint and heavy duty construction make it easy to integrate into new or existing production lines.

- Labeling speed/rate: up to 200 per minute; label speeds up to 2400 inches per minute
- Label size: minimum 1/2" wide x 1/2" long; maximum 6-1/2" wide x 12" long (optional sizes available)
- Application method: wipe-on and tamp
- Equipped with the Label Mill 1510 wipe-on labeler for high-speed, accurate label placement

LABEL MILL®

Label Mill 3605 Automatic Print and Apply Labeling System

The hand-held labeler interface allows for quick and easy set-up with adjustment for product delay, tamp duration, cycle type and other key functions. The system's modular design allows for quick in-plant modifications to allow you to meet all your labeling needs.

- Print speed/rate: up to 16" per second (approximately 10 to 90 per minute, depending on label and product size)
- Label size: minimum 1" wide x 1/2" long; maximum 4" wide x 14" long
- Application method: tamp is standard; wipe-on, blow, corner-wrap, and adjacent panel are optional

Label Mill 3605 Print and Apply System

Label Mill 3501/3510 Automatic Print and Apply Labeling System

More than two dozen I/O points allow for easy integration to scales, bar-code scanners, product diverters, automatic machines, conveyor lines, remote trigger, second trigger for variable data, tamp synchronization, and indicator signals such as "low label," "low ribbon," "printer error," "batch done," and more.

- Print speed/rate: up to 16" per second (approximately 10 to 90 per minute, depending on label and product size)
- Label size: minimum 1" wide x 1/2" long
- Application method: tamp is standard; wipe-on, flag, blow, corner-wrap, and swing tamp are optional

Label Mill 3501/3510 Print and Apply System

Label Mill 1502 Automatic Labeling System

More than two dozen I/O points allow for easy integration to scales, bar-code scanners, product diverters, automatic machines, conveyor lines, remote trigger, tamp synchronization, and indicator signals such as "low label," "broken web," "batch done," and more.

- Labeling speed/rate: up to 2500 linear inches per minute and, depending on label and product size, approximately 565 labels per minute. Higher speeds available based on application.
- Label size: minimum 1/2" wide x 1/2" long; maximum 6-1/2" wide x 12" long (optional sizes available)
- Application method: tamp, wipe-on, and blow

Label Mill 1502 Label Applicator

Label Mill 1201 Semi-Automatic Table Top Label Printer and Applicator

The Label Mill 1201 label printer applicator can serve as a packing table tamp applicator, allowing for immediate labeling at the time of packing insuring fast and accurate information.

- Labeling speed/rate: up to 30 per minute
- Label Size: minimum 1" wide x 1/2" long; maximum 4" wide x 6" long
- Application method: swing tamp

Label Mill 1201 Label Printer and Applicator

Label Mill 1000/1005 Semi-Automatic Table Top Label Applicator

Using the unique rail-mounted modules, the Label Mill 1005 can serve as a label dispenser, tamp applicator, round-product applicator, and flag applicator. Because this unit can do them all, there is no need for additional units for each type of application.

- Labeling speed/rate: up to 45 per minute
- Label Size: minimum 1/2" wide x 1/2" long; maximum 4-1/4" wide x 8" long (optional sizes available)
- Application method: tamp, flag, round-product

Label Mill 910 Dispenser

The Label Mill 910 is a medium duty cost effective label dispenser. Its compact design works well on production lines or anywhere you need labels dispensed.

Label Mill 1000/1005 Label Applicator

Label Mill 910 Dispenser

Form...Print...Label. We have the complete line to fit your application.

Plastic Strap Machine Heads

SAMUEL
Samuel Strapping Systems

Dynaric, Inc.

Plastic Strap Machine Heads are just the head of a plastic strapping machine. Without the rest of the machine getting in the way, you can integrate the head into your existing set-up, giving you flexibility not possible with a full-fledged strapping machine. In some cases, the head simply "snaps" into existing machinery.

Samuel VK30 High Performance Plastic Strapping Heads

The VK30 plastic strapping head is ideal for today's high tension and high seal joint requirements in cotton, textile, lumber, brick, steel and metal product applications. The VK30 offers higher tension capability and greater strap capacity.

- Polypropylene or Polyester strap size: 3/8" (9mm), 1/2" (12mm), 5/8" (16mm), 3/4" (19mm) wide; .015" (38mm) to .050" (1.27mm) thickness
- PLC controls allow high-speed strapping operations with flexible sequence control, as well as adaptability into many diverse applications and head orientations.
- Workload is spread out among three versatile, direct drive motors which are individually optimized to perform specific functions: high speed feed and slack strap take up; final heavy tension; sealer/cam activations.

Samuel VK30 Strapping Head

Dynaric MHB1 High Performance Plastic Strapping Heads

- Minimize downtime with the quick-change strapping unit
- Custom built to meet your needs
- Use Dynaric XXL coils to reduce downtime cause by coil changes
- Automatic strap feed and refeed
- To ensure long-lasting operation the strapping and sealing unit are mounted vertically to avoid debris

Dynaric MHB1 Strapping Head

Plastic Strapping Methods

Type B1F Strapping Head

Type B1F
For vertical strapping with side-mounted strapping head
- Strap head travels towards packing unit

Type B2F
For vertical strapping with side-mounted strapping head
- Strap head travels towards packing unit
- Lance guides strap through pallet voids

Type C2F
For vertical strapping with top-mounted strapping head
- Strap head travels towards packing unit
- Lance guides strap through pallet voids
- Compression units available

Type C2LF
For vertical strapping with top-mounted strapping head
- Strap head travels towards packing unit
- Strapping unit travels into strapping position(s) alongside the packing unit
- Lance guides strap through pallet voids
- Compression units available

Type C4F
For vertical strapping with top-mounted strapping head
- Strap head travels towards packing unit
- Compression units available

Type D1LF
For horizontal strapping with side-mounted strapping head
- Strap head travels alongside packing unit into strapping position(s)
- Strapping unit travels towards packing unit

Type C2F Strapping Head

We provide service for all of the machines and tools we sell.

Dynaric, Inc.

DF30 Strapping Machine

DF30 Semi-Automatic Strapping Machine

An easy to use strapping machine designed to run 1/4" to 5/8" strapping. Equipped with externally adjustable strap feed and electronic tension control, the DF30 is the perfect machine for securing and unitizing outgoing shipments of mail trays or bundled mail.
- Fast cycle time: 25-30 per minute
- Operates on 115v single-phase power so the machine can be plugged in virtually anywhere in your facility
- AC motor utilizes a direct drive dual motor system, eliminating the need for clutches and brakes

D3100 and D3300 Strapping Machines

D3100 and D3300 Automatic Strapping Machines

Operator friendly strapping machines capable of over 48 strapping cycles per minute. Cycle initiation is by start switch, table mounted photo switch or foot switch. The coil is internally mounted, which minimizes required floor space, but utilizes an open design so that the coil is visible. D3100 accepts 5mm or 6mm strap.
- D3300 accepts 9mm (3/8") or 12mm (1/2") strap; the D3100 uses 1/4" (5mm & 6mm)
- Operates on 120v single-phase power so the machine can be plugged in virtually anywhere in your facility
- Fully automatic version available

DA-93 Strapping Machines

DA-93 Economical Automatic Strapping Machines

The DA-93 will apply up to 30 heat sealed straps/minute, with speed, consistency and reliability. It uses economical polypropylene strapping in a broad range of strap widths and break strengths thereby insuring that the user can use the most economical strap for their products. The unit includes easy strap feed access, strap loop ejector, and short feeding detection device with a strap re-feed function, and end of strap sensor among its standard equipment.
- DA-93 accepts 8mm, 9mm, 12mm or 15mm strapping
- Cycle time: 2-2.5 sec/strap

AM-650 and AM-659 Strapping Machines

AM-650 and AM-659 High Speed Automatic Strapping Machines

The AM-650 and AM-659 are high speed automatic heat seal strapping machines designed for ease of operation. They are capable of applying up to 50 straps/minute to a wide range of sizes and types of packages. Because of the ability to use many sizes of strap, and the electronic tension control, it enables the customer to choose the least expensive strap for their package.

The AM-650 and AM-659 have many standard features that include automatic coil feed system, strap loop ejector, short feed detector, refeed system and foot bar cycle activation pedal.
- Applies 50 straps/minute
- AM-650 accepts 5mm, 6mm (standard) and 9mm (optional) strap; the AM-659 uses 9mm or 12mm
- Operates on 120v single-phase power so the machine can be plugged in virtually anywhere in your facility
- Standard arch sizes available 25.5" wide x 15.4" high (650mm x 400mm) and 25.5" wide x 23.6" high (650mm x 600mm)

Many other models are available!

Plastic Strapping Machines

Dynaric, Inc.

Strapping machines are used for keeping boxes, packages, and bundles held tight and together. These machines are loaded with a roll of material called strapping that is then dispensed and sealed around the product that needs to be held together, primarily for the purpose of shipping.

N3400 Strapping Machine

N3400 High Speed Automatic Strapping Machine

A high performance automatic strapping machine equipped to provide reliable performance while using less energy. The N3400 is equipped with an automatic strap feeding system as well as an "end of strap" sensing system with automatic strap discharge once a coil has been completed.

- Up to 55 cycles per minute, depending on tension setting and package size
- Strap width 5mm to 12mm
- Uses standard 120v power to operate the 24 volt direct drive servo motors. The direct drive Servo motors not only save energy but also increasing machine reliability.

N3400A Strapping Machine

N3400A Fully Automatic Strapping Machine

A high performance, innovative and low maintenance fully automatic strapping machine that is equipped to provide reliable performance while using less energy. The N3400A has fewer moving wear parts, all metal strap drive rollers, hot knife sealing technology and DAT (direct access technology) so no tools are needed to access strap path for cleaning.

- Up to 35 bundles per minute
- Energy saving direct drive motor: the direct drive servo motors not only save energy, but also increase machine reliability.
- Strap width 5mm to 12mm
- Uses standard 120v power to operate the 24 volt direct drive servo motors.

ST1 Strapping Machine

ST-1 Fully Automatic High Speed Operator-Free Strapping Machine

A high-speed machine equipped with variable speed powered belts, eliminating the need for an operator. Although the unit can be switched to manual and used like an offline unit, the ST-1 is designed to operate automatically using photo switches to detect incoming packages. To decrease downtime in between coil changes the ST-1 is equipped with an externally located dispenser that can utilize XL coils. It also has an automatic strap feeding system as well as an "end of strap" sensing system with automatic strap discharge once a coil has been completed.

- Accepts 5mm, 1/4", 6mm, 9mm or 3/8" strapping; no parts required to change between sizes
- Adjustable conveyor height from 30.5" to 35.4"
- Operates on 120v single-phase power or 208v-460v 3-phase power

D2400 Strapping Machine

D2400 High Speed Automatic Strapping Machine

When initiated, the strap is pulled around the package then tightened to the precise tension; the plastic strap is then heated, sealed and pressed to create the best seal possible, all in approximately 1.2 seconds.
The D2400 has a low maintenance strapping head with minimal moving parts, reducing mechanical malfunction due to part failure or wear. All body panels can be easily removed to access the strapping head, electrical box and strap pool area.

- High speed cycle time, capable of more than 50 cycles per minute
- Accepts 5mm, 6mm or 9mm strapping, requiring no additional parts
- 110 volt Single-phase

Refer to pages 34-35 for information on the poly strap for these machines!

Many other models are available!

Reliable strapping machines are designed to increase overall production in any packaging environment.

A variety of industries can benefit from the use of strapping machines. Workers in commercial printing, food, general packing, lumber, newspaper printing, magazine publishing, and postal fields all need various types of strapping. Shipping books, papers, and merchandise requires a simple and secure method of packaging. Strapping machines are the quickest and easiest (and often the most cost-effective) method of fastening for these industries.

Dynaric, Inc.

DF11 Heavy-Duty Strapping Machine

The DF11 is built around a rugged steel frame with heavy-duty components and has proven to be a "workhorse" in many industries. The DF11 comes standard with roller tabletops allowing the user to handle packages effortlessly. The machine can be configured with many different arch sizes to best fit your application needs.
- Many arch sizes available for small and extra large packages
- Accepts 3/8" or 1/2" plastic strapping

DF11C Narrow Seal Automatic Strapping Machine

The DF11C is a specialized machine designed to produce a tight bundle around items as small as 1.6" wide. Engineered with a narrow sealing head, the DF11C can strap rigid material such as steel bars, as well as cylindrical products like PVC tubing, metal pipes, and even fence posts - while maintaining strap tension.
- Ideal for strapping packages as small as 1.6" wide by 1.2" high
- 3/8" or 1/2", strapping can be used
- Operates on 120 volts single-phase power, enabling it to be used in any location

DF11C Strapping Machine

DF11 Strapping Machine

DF11SCA Fully Automatic Stainless Steel Cabinet Strapping Machine

The DF-11SCA is an operator-less machine incorporating a stainless steel exterior cabinet design for use in the harsh environments of the meat and poultry packing environments. Utilizing powered belts on the tabletops and photo switches, this unit can place up to two straps automatically. The dispenser is internally located, which minimizes the required floor space and reduces the amount of condensation which can form on the coil.
- Accepts 3/8" or 1/2" strapping
- Operates on 220v 3-phase power; also available in 110v single-phase or 460v 3-phase power variations

DF11SCA Strapping Machine

DF11SA Fully Automatic All Stainless Steel Strapping Machine

The DF-11SA is an operator-less machine incorporating a stainless steel exterior cabinet design and corrosion resistant (stainless steel, brass, plastic, etc.) parts to provide maximum protection in the harsh environments of the meat and poultry packing industries. Utilizing powered belts on the table-tops and photo switches, this unit can place up to two straps automatically.
- Operates on 3/8" or 1/2" strapping
- Operates on 220 volt 3-phase power or 440 volt 3-phase power (optional)

D11SA Strapping Machine

DF117 Automatic Side Seal Strapping Machine

The DF117 side seal strapping machine is ideal for integration with low (13" high) conveyor lines. The arch configurations (height and width) increase independently in 200mm (approximately 8") increments, so configuring the arch for a specific application is doable. The DF117 can be set up to communicate with your conveyor controls by installing an automation capability kit.
- Accepts 3/8" or 1/2" strapping
- Operates on 220v 3-phase power; also available in 115v variation

DF117 Strapping Machine

Other DF11 models are available!

We provide service for all of the machines and tools we sell.

Plastic Strapping Machines

Samuel Strapping Systems

A small business that has limited shipping or packaging needs might use a semi-automatic low volume strapping machine. Another small to medium company that has a consistent amount of shipping, but not a mass amount of production, shipping or packaging might use the semi-automatic moderate volume strapping machines. Mass production or packaging – like postal offices, shipping companies, or a widely distributed newspaper company – would probably use a fully automatic, high volume strapper.

P726 Strapping Machine

P726 Semi-Automatic Strapping Machine
- Uses polypropylene strap sizes 1/4", 3/8", or 1/2" (6, 9, 12mm) wide with no additional parts required
- Package size: 2.5" x 1.25" minimum
- Automatic motor shut-off if not used within 60 seconds
- Tension: 10 to 132 lbs.
- Adjustable package guides ensure positioning accuracy of package over sealing head.
- 110 volt allows for use anywhere in the facility.
- Heater blade reaches operating temperature in just 5 seconds and maintains an optimum operation level thereafter.
- All operating functions (strap feed, strap tension and heater bar temperatures) are controlled by a printed circuit board.

P714 Semi-Automatic Strapping Machine
- Uses polypropylene strap sizes 1/4", 3/8", 1/2" or 5/8" wide
- Package size: 4" x 1" x 5" minimum
- Tension: electronic tension up to 88 lbs.
- Unique dual tension mode
- 110 volt allows for use anywhere in the facility
- 45 second start up

P702-59 Strapping Machine

P714 Strapping Machine

P702-59 Automatic Strapping Machine
- Uses polypropylene strap sizes 5mm or 6mm wide, embossed or smooth
- Package size: 2.5" x 1" minimum to within arch size
- Strapping speed: up to 65 cycles per minute
- Tension: 2 to 70 lbs.
- The operator control panel is hinged to allow access from enhanced diagnostics and the ability to make adjustments.
- The compact frame features an inside mount strap dispenser that hinges up for auto strap loading at knob.
- All P702 series machines have a hinged open top plate for easy access to the strapping head. They also feature quick release feed guides for immediate access to the strap feed system without the need for tools.

P702-12 Automatic Strapping Machine
- Uses polypropylene strap 9mm or 12mm wide, embossed or smooth
- Package size: 2.5" x 1" minimum to within arch size
- Strapping speed: up to 60 cycles per minute
- Tension: electronic tension 2 to 100 lbs.
- Outside mount dispenser for fast auto strap loading at waist height
- The operator control panel is hinged to allow access from either side of the machine.
- The new quick release dispenser flange lock knob makes coil changes faster.
- All P702 series machines have a hinged open top plate for easy access to the strapping head. They also feature quick release feed guides for immediate access to the strap feed system without the need for tools.

P702-12 Strapping Machine

P702N Narrow Head Strapping Machine is also available.

Our Service Technicians can repair your tools and machines!

Our trained and certified service technicians can repair your tools and machines, even if you didn't buy them from us. Call us or visit us online at carlsonsystems.com, midatlanticfasteners.com, or westerntool.com to find the location nearest you, and our technicians will get you back up and running in no time!

Ask about our UP Time Preventive Maintenance program for your packaging machines.

There are two basic substrates used for strapping: plastic and steel. From these two substrates, a number of different strapping products are available to meet a wide variety of packaging requirements. The items that need to be packaged determine which materials are best for your application.

Plastic straps are made of polyester for medium and heavy duty applications, or polypropylene for light to medium bundles or packages.

Samuel Strapping Systems

P715 Automatic Strapping Machine

The P715 combines a heavy duty frame design with the high operating speeds and precision strap placement of many of the newer machines.
- Uses polypropylene strap: 5mm, 6mm (1/4"), 3/8" or 1/2" wide, 8" x 8" or 9" x 8" core
- Package size: 3.1" x 1" minimum to within arch size
- Strapping speed: up to 70 cycles per minute
- Tension: 2 to 130 lbs.
- The operator control panel is located on the table top of the machine for easy access.
- A diagnostics display monitors the electrical operating system for instant solutions should a problem arise.
- The three motor seal engine design provides a high level of performance while greatly reducing the number of moving parts when compared to other machines.
- The dispenser can be adjusted to work with 8"x8" coils or 9"x8" coils.

P715 Strapping Machine

P702B Fully Automatic Conveyorized Strapping Machine

The P702B features high operating speeds combined with heavy duty structural designs, allowing it to be used in the most demanding applications. It features automatic strap loading, automatic strap ejector when the coil runs out, and a loop ejector when it is cycled without a package present.
- Uses polypropylene strap: 5mm, 6mm, 9mm or 12mm wide, 8" x 8" core
- Package size: 4" x 1.5" minimum to within arch size
- Strapping speed: up to 40 packages/65 cycles per minute
- Tension: up to 100 lbs.
- Single, double, multiple strap and bypass modes
- All P702 series machines have a hinged open top plate for easy access to the strapping head. They also feature quick release feed guides for immediate access to the strap feed system without the need for tools.

P702B Strapping Machine

P702BPS Fully Automatic Conveyorized Stainless Steel Strapping Machine

In addition to the features of the P702B, the P702BPS features a stainless steel frame, body and covers for use in cold, wet environments.
- Uses polypropylene strap: 5mm, 6mm, 9mm or 12mm wide, 8" x 8" core
- Package size: 2.75" x 1" x 5" minimum to within arch size
- Strapping speed: up to 40 packages/65 cycles per minute
- Tension: up to 100 lbs.
- All P702 series machines have a hinged open top plate for easy access to the strapping head. They also feature quick release feed guides for immediate access to the strap feed system without the need for tools.

P702BPS Strapping Machine

OB-360 Automatic Paper and Film Tape Banding Machine

Three modes of operation–single action, continuous operation and pause–to accommodate various product requirements. Straps cases from 30mm to 420mm wide with a three-stage tightening adjustment that varies depending on the case: firm for hard products and gentle for fragile products.
- Uses paper tape 1.125" W x 623' L or Poly Film 1.125" W x 656' to 1214' L
- Straps packages from 1.125" W x 0.375" H to 16.5" W x 8.25" H (30mm x 10mm to 420mm x 210mm)
- High capability - up to 30 cycles per minute.

Many other machines and arch sizes are available.

Samuel OB-360 Strapping Machine

Samuel Strapping Systems

EP-3080

Standard Duty Oscillated Wound
Core I.D. 8" and 16"

- Face width 3" - 6"
- 8" Rubber tires
- Quick load system

EP-3080 Oscillated Wound Strapping Dispenser

EP-3100

Regular Duty Oscillated Wound
Core I.D. 16" only

- Face width 3" - 6"
- Large upper tray for battery tools
- 10" Rubber tires

EP-3200

Premium Oscillated Wound with Strap Troller

- Core I.D. 16" only
- Face width 3" - 6"
- Large upper tray for battery tools
- 10" Rubber tires

EP-3100 Oscillated Wound Strapping Dispenser

EP-3340

Ribbon Wound Steel

- 3/4" to 1-1/4" steel strapping
- Core I.D. 16"
- 8" Rubber tires
- Quick load system

EP-3350

Ribbon Wound Steel

- 3/4" to 1-1/4" steel strapping
- Additional tool holders
- Extra heavy duty wheels
- Large tool tray
- Robust build

EP-3200 Oscillated Wound Strapping Dispenser

The strap carts shown are some of the many models available.

EP-3340 Ribbon Wound Steel Strapping Dispenser

EP-3350 Ribbon Wound Steel Strapping Dispenser

100-567 Standard

100-567-HD Heavy Duty

NM-7

200-RW Heavy Duty

100-567

Standard Duty Oscillated Wound
Mobile dispenser comes with large tool tray to accommodate manual and battery powered tools. Heavy duty 10" wheels, automatic brake, strap payoff on the side. Can be used with steel and plastic strapping with 16"x6" and 16"x3" put up.

100-567-T

Standard Duty Oscillated Wound with Troller Brake
Mobile dispenser comes with heavy duty troller brake and large tool tray. Heavy duty 10" wheels. Can be used with steel and plastic strapping with 16"x6" and 16"x3" put up.

100-567-HD

Heavy Duty Oscillated Wound
Extra rugged mobile dispenser comes with heavy duty troller brake and heavy duty 10" wheels. Reinforced frame and tool tray with tool holsters to hold one cutter and one sealer. Used with steel and plastic strapping with 16"x6" and 16"x3" put up.

100-7HD

Stationary Horizontal Oscillated Wound
Stationary horizontal dispenser. Made of heavy gauge steel, the spun bucket is bearing mounted for easy strap payoff. Strap payoff is from the inside of the coil.

NM-7

Oscillated Wound
Rugged tubular steel frame with tool tray, seal storage compartment & 6" rubber tires. Heavy gauge spun steel discs with positive coil braking device. For plastic strapping coils with 8" face and 8" inside diameter.

200-RW

Heavy Duty for Ribbon Wound Steel Strap
Heavy duty welded steel frame with hardened steel rollers for smooth coil payoff. Features easy loading from a vertical or horizontal dispenser position, 10" HD wheels, a tool tray and holsters for one strap cutter and one strap sealer. Manually adjustable for strap sizes of 3/4", 1-1/4" and 2". Strap payoff to either side.
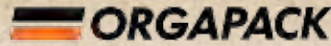
100-8

Heavy Duty for Ribbon Wound Steel Strap
Heavy duty floor model. Off feeds from outside diameter. Heavy duty bearing for smooth action. For ribbon wound strapping 3/4" to 2".

100-9

Heavy Duty for Ribbon Wound Steel Strap
Heavy Duty with foot activated shear. For ribbon wound strapping 3/4" to 2".

SAMUEL 1855
Samuel Strapping Systems

ORGAPACK

FROMM packaging systems

Manual Tools

Tensioners

- Tensions polypropylene strap, polyester strap and poly cord
- There are many different types of regular duty and heavy duty strap tensioners available to strap widths from 3/8" to 3/4"

Regular Duty Plastic Strap Tensioners

Heavy Duty Plastic Strap Tensioners

Model	Description (Manual Tensioners)
T6 EP-1150	Drum-type for 3/8" - 3/4" (10mm-19mm) plastic strapping. Flat surfaces.
T4 EP-1175	Push-type for 3/8" - 3/4" (10mm-19mm) plastic strapping. Curved surfaces.

Sealers

- Seals polypropylene strap, polyester strap and poly cord
- Front action, front action offset and side action models are available

Round surface tensioners and sealers are also available.

Regular Duty Sealer

Heavy Duty Sealer Front Action

Heavy Duty Sealer Side Action

Model	Description (Manual Sealers)
S-3	For 3/8" (10mm) plastic strapping.
S-4 & S-4HD EP-1225-12 EP-1250-12	For 1/2" (13mm) plastic strapping.
S-5 & S-5HD EP-1225-58 EP-1250-58	For 5/8" (16mm) plastic strapping.
S-6 & S-6HD EP-1225-34 EP-1250-34	For 3/4" (19mm) plastic strapping.

Combination Tools (Seal-Type)

Single-Lever Manual

- For Polypropylene (PP) and Polyester (PET) Strapping
- Manual drum type combination tensioning and sealing tool
- Feed wheel type tensioning
- Strap width range: 1/2" x .015" to .035"; 5/8" x .015" to .040"

Manual Plastic Strap Combo Tools

Model	Seal	Strap Width	Strap Thickness
P403	4-M	1/2" 12 - 13mm	0.015" - 0.035" 0.40 - 0.90mm
P404	5-M	5/8"	0.015" - 0.035"
OR 4000.13	ORP 2100.13	1/2" 13mm	0.016" - 0.028" 0.40 - 0.70mm
OR 4000.16	ORP 2300.16	5/8" 16mm	0.020" - 0.040" 0.50 - 1.0mm

Power Tools

Combination Tools - Sealless

Battery Powered Tension and Sealing Tools

- Operates on one 14.4v battery which recharges in 25 minutes; delivers approximately 250 polypropylene or 120 polyester cycles per charge
- Ergonomic design allows both tensioning and sealing functions to be completed using convenient thumb activated buttons

Pneumatic Powered Friction Weld Tools

- Combo tool features pneumatic tension and friction sealing in one tool

There are many other tools available - some of the most popular models are shown.

Friction Weld Battery Powered Plastic Strap Combo Tools

Friction Weld Battery Powered Plastic Strap Combo Tools

Model	Strap Type	Strap Size		Description
		in	(mm)	
P326	Polyester or Polypropylene	3/8" x .016-.041 to 5/8" x .016-.041	(10 x .40-1.05mm) (16 x .40-1.05mm)	3.0 Ah Li-Ion battery
P327	Polyester or Polypropylene	5/8" x .025-.041 to 3/4" x .016-.041	(16 x .65-1.05mm) (19 x .40-1.05mm)	3.0 Ah Li-Ion battery
P330	Polyester or Polypropylene	3/4" x .031-.060 to 1" x .016-.053	(19 x .80-1.53mm) (25 x .40-1.35mm)	3.0 Ah Li-Ion battery
P350	Polyester	1/2" x .031 to 1-1/4" x .044	(13 x .79mm) (32 x 1.12mm)	Pneumatic tension and friction sealing
P355	Polyester or Polypropylene	3/8" x .016 to 5/8" x .041	(10 x .4mm) (16 x 1.04mm)	Pneumatic tension and friction sealing
P356	Polyester	5/8" x .026 to 3/4" x .053	(16 x .65mm) (19 x 1.35mm)	Pneumatic tension and friction sealing

Pneumatic Sealless Plastic Strap Combo Tools

Polypropylene Strap - Machine Grade

Dynaric, Inc.

Refer to the strapping machines on pages 27-31

What is Polypropylene Strap?

The most economical of all strapping material, polypropylene is a light weight strapping that can be used for a variety of bundling applications: carton closure, bundling, reinforcement and unitizing. It is available in a wide variety of sizes and gauges and offers the greatest elongation of all strapping and has good initial recovery characteristics. Most polypropylene can be heat sealed with a joint efficiency of 70 to 80%. By nature, polypropylene strapping is very flexible and has the ability to mold to contours of odd-shaped or irregularly shaped packages.

Polypropylene Strap - Machine Grade

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
P136-8	5.0mm	.018''	20,000'	115#	8"	8"	W,Y
P956-8	5.0mm	.018''	16,750'	115#	8"	8"	W
P120-8	5.0mm	.020''	25,000'	120#	8"	8"	W
P120-9	5.0mm	.020''	25,000'	120#	9"	8"	W,Y
P113-8	5.0mm	.014''	25,000'	140#	8"	8"	C
P2135-8	5.4mm	.018''	22,400'	145#	8"	8"	W,Y
P2140-8	5.7mm	.020''	23,000'	160#	8"	8"	Y
P2140-9	5.7mm	.020''	23,000'	160#	9"	8"	B,BL,G,OR,W,Y
P971-9	5.7mm	.017''	18,000'	170#	9"	8"	B,Y
P2160-8	5.7mm	.017''	19,500'	170#	8"	6.75"	OR,W,Y
P180-8	5.7mm	.022''	16,500'	180#	8"	6.75"	W,Y
P2210-8	5.8mm	.025''	18,500'	210#	8"	8"	C,W
P2210-9	5.8mm	.025''	18,500'	210#	9"	8"	OR,Y
P976-8	6.0mm	.020''	15,000'	170#	8"	8"	W,Y
P2280-8	6.0mm	.020''	22,000'	170#	8"	8"	BL,C,W
P2280-9	6.0mm	.020''	22,000'	170#	9"	8"	B,BL,C,G,OR,W,Y
P212-8SP	6.0mm	.018''	16,750'	200#	8"	7.5"	C,Y
P216-8SP	6.0mm	.016''	18,000'	200#	8"	7.5"	C,Y
P209-4	1/4"	.014''	20,000'	150#	4"	5.75"	C,Y
P140-9	1/4"	.017''	18,000'	170#	9"	8"	Y
P146-8	1/4"	.023''	18,000'	185#	8"	8"	W,Y
P146-9	1/4"	.023''	18,000'	185#	9"	8"	W,Y
P146-11	1/4"	.023''	18,000'	185#	11"	8"	W
P154-9	1/4"	.020''	20,000'	185#	9"	8"	B,BL,C,G,OR,W,Y
P2200-8	1/4"	.024''	18,500'	190#	8"	8"	C,OR,W
P212-4	1/4"	.018''	15,000'	200#	4"	5.75"	C,Y
P145-8	1/4"	.022''	18,000'	225#	8"	8"	W
P145-9	1/4"	.022''	18,000'	225#	9"	8"	C,W,Y
P141-4	6.2mm	.017''	18,000'	155#	4"	5.75"	Y
P142-4	6.2mm	.022''	15,000'	200#	4"	6"	BL,C,W,Y
P2225-8	6.5mm	.024''	18000'	220#	8"	8"	BL,Y
P2275-8	6.7mm	.026''	16,500'	250#	8"	8"	BL,Y
P500-8	6.8mm	.025''	16,500'	225#	8"	8"	B,BL,G,OR,W,Y
P500-9	6.8mm	.025''	16,500'	225#	9"	8"	BL
P153-9	6.8mm	.023''	17,000'	230#	9"	8"	W,Y
P3220-9	8.0mm	.022''	12,900'	220#	9"	8"	W,Y
P969-8	8.6mm	.019''	12,000'	200#	8"	8"	W
P385-9	8.6mm	.019''	12,300'	225#	9"	8"	W,Y
P3225-6	3/8"	.022''	10,000'	250#	8"	6"	BL,C,W,Y
P3225-8	3/8"	.022''	12,900'	250#	8"	8"	B,C,W,Y
P3225-9	3/8"	.022''	12,900'	250#	9"	8"	B,BL,C,P,W,Y
P382-6	3/8"	.022''	10,000'	300#	8"	6"	B,C,G,W
P382-8	3/8"	.022''	12,900'	300#	8"	8"	C,W,Y
P382-9	3/8"	.022''	12,900'	300#	9"	8"	B,BL,C,W,Y
P382-11	3/8"	.022''	10,000'	300#	11"	8"	
P654-8SP	3/8"	.019''	11,250'	300#	8"	7.5"	B,C
P966-16	3/8"	.022''	12,000'	300#	16"	6"	W
P3024-9	3/8"	.027''	8,700'	410#	9"	8"	B,W
P3024-16	3/8"	.027''	8,700'	410#	16"	6"	B,W

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
P616-8	9.5mm	.016''	12,000'	300#	8"	8"	C
P714-16	7/16"	.022''	10,500'	400#	16"	6"	B,C
P714-8SP	7/16"	.022''	8,250'	400#	8"	7.5"	B,C
P716-16	7/16"	.025''	8,000'	500#	16"	6"	B,C
P716-8SP	7/16"	.025''	6,700'	500#	8"	7.5"	B,C
P718-16	7/16"	.030''	7,000'	600#	16"	6"	B,C
P3600-16	10.5mm	.025"	8,000'	525#	16"	6"	B
P3625-16	10.5mm	.031"	8,000'	625#	16"	6"	B
P723-16	11.0mm	.013"	9,000'	250#	16"	6"	C
P503-6	1/2"	.022''	9,000'	300#	8"	6"	B,BL,C,W,Y
P503-8	1/2"	.022''	9,900'	300#	8"	8"	B,BL,C,W,Y
P503-9	1/2"	.022''	9,900'	300#	9"	8"	B,BL,C,W,Y
P5300-6	1/2"	.022''	9,000'	300#	8"	6"	C,W
P5300-8	1/2"	.022''	9,900'	300#	8"	8"	B,C,W,Y
P5300-9	1/2"	.022''	9,900'	300#	9"	8"	B,C,W,Y
P5300-11	1/2"	.022''	7,500'	300#	11"	8"	W
P7000-9X8	1/2"	.026''	7,000'	400#	9"	8"	BL
DM 7000	1/2"	.026''	7,000'	400#	16"	6"	B,BL
P414-8	1/2"	.025''	7,546'	425#	8"	8"	W
P414-11	1/2"	.025''	7,546'	425#	11"	7.5"	B,W
P414-16	1/2"	.025''	9,000'	425#	16"	6"	B,W
P415-6	1/2"	.026''	7,200'	440#	8"	6"	BL
P415-8	1/2"	.026''	8,200'	440#	8"	8"	W
P415-9	1/2"	.026''	8,200'	440#	9"	8"	W
P415-16	1/2"	.026''	8,947'	440#	16"	6"	B,BL,W
P4024-6	1/2"	.026''	7,500'	550#	8"	6"	B,W
P4024-8	1/2"	.026''	6,600'	550#	8"	8"	C
P4024-9	1/2"	.026''	6,600'	550#	9"	8"	B,C,W
P4024-16	1/2"	.026''	6,600'	550#	16"	6"	B,C,W
P418-11	1/2"	.028''	5,906'	550#	11"	7.5"	W
P418-16	1/2"	.028''	8,202'	550#	16"	6"	B,W
P419-16	1/2"	.028''	8,202'	550#	16"	6"	B,BL,W
P420-9	1/2"	.032''	7,218'	600#	9"	8"	Y
P420-16	1/2"	.032''	7,218'	600#	16"	6"	B,BL,C,W,Y
P420-24	1/2"	.032''	9,515'	600#	24"	6"	B,Y
P421-16	1/2"	.033''	7,218'	600#	16"	6"	B,BL,DBL,Y
P421-24	1/2"	.033''	9,515'	600#	24"	6"	B,Y
P964-16	1/2"	.032''	6,000'	625#	16"	6"	BL
P425-9	1/2"	.037''	5,577'	800#	9"	8"	B
P425-16	1/2"	.037''	5,577'	800#	16"	6"	B
P425-24	1/2"	.037''	8,000'	800#	24"	6"	B,W
P968-16	14.8mm	.023''	7,500'	550#	16"	6"	W
P6350-8	5/8"	.017''	9,900'	350#	8"	8"	W,Y

Strap Color Codes

B	= Black	G	= Green
W	= White	OR	= Orange
C	= Clear	P	= Purple
BL	= Blue	S	= Silver
Y	= Yellow	DBL	= Dark Blue

Polypropylene is a superior choice for all applications from light to heavy duty with an emphasis on economy.

Dynaric, Inc.

Controlled Elongation Polypropylene Strap

Controlled elongation polypropylene strap offers lower elongation as standard for better initial tension and superior creep resistance.

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
X3500-9	3/8"	.030''	8,200'	525#	9"	8"	B
X3500-16	3/8"	.030''	8,200'	525#	16"	6"	W
X4620-16	11.6mm	.030''	7,200'	620#	16"	6"	W
X5450-9	1/2"	.020''	10,900'	475#	9"	8"	B,W
X5450-16	1/2"	.020''	9,200'	475#	16"	6"	B,BL,W
X5500-9	1/2"	.022''	9,900'	525#	9"	8"	B,W
X5500-16	1/2"	.022''	8,370'	525#	16"	6"	B,W,Y
X5575-9	1/2"	.026''	8,258'	600#	9"	8"	B,G,W
X5575-16	1/2"	.026''	7,000'	600#	16"	6"	B,BL,W,Y
X5575-24	1/2"	.026''	9,500'	600#	24"	6"	B,Y
X972-16	1/2"	.026''	7,910'	600#	16"	6"	W,Y
X5650-16	1/2"	.028''	7,000'	650#	16"	6"	BL,G,W,Y
X5725-8	1/2"	.031''	8,200'	725#	8"	8"	Y
X5725-9	1/2"	.031''	7,100'	725#	9"	8"	B,W,Y
X5725-16	1/2"	.031''	6,100'	725#	16"	6"	B,G,W,Y
X6575-16	5/8"	.024''	7,200'	590#	16"	6"	G,W
X6650-16	5/8"	.025''	6,500'	680#	16"	6"	W
X6700-9	5/8"	.029''	6,000'	725#	9"	8"	Y
X6700-16	5/8"	.029''	6,000'	725#	16"	6"	Y
X7950-8	3/4"	.032''	4,500'	1050#	8"	8"	B

Ultraband Polypropylene

A hybrid of characteristics blended to create the optimum in performance and economy. Ultra low elongation offers high resistance to impact and superior break strength for the most challenging packaging applications.

- Can replace higher priced polyester and steel strapping in many applications
- Absorbs more shock energy than steel and PET
- Can be friction welded, eliminating the high cost metal seals

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
U3700-3	7/16"	.037''	3,200'	700#	16"	3"	S,G
U3700-16	7/16"	.037''	6,400'	700#	16"	6"	S,G
U5800-16	1/2"	.037''	6,600'	800#	16"	6"	B,G,S,W
U6900-3	5/8"	.035''	2,550'	1025#	16"	3"	B,G,S,W
U6900-16	5/8"	.035''	5,100'	1025#	16"	6"	B,G,S,W
U6910-3	5/8"	.040''	2,000'	1250#	16"	3"	B,G,S,W
U6910-16	5/8"	.040''	4,000'	1250#	16"	6"	B,G,S,W
U7990-3	3/4"	.032''	1,950'	1200#	16"	3"	B,G,S,W
U7990-16	3/4"	.032''	3,900'	1200#	16"	6"	B,G,S,W
U7160-3	3/4"	.045''	1,650'	1600#	16"	3"	S,G
U7160-16	3/4"	.045''	3,300'	1600#	16"	6"	S,G

Polypropylene Strap - Recycled Hand Grade

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
RS533-3HG	1/2"	.020''	4,500'	300#	16"	3"	B
RS535-3HG	1/2"	.026''	3,600'	500#	16"	3"	B
RS536-3HG	1/2"	.028''	3,600'	600#	16"	3"	B
RS562-6HG	1/2"	.013''	9,000'	250#	16"	3"	B
RS563-6HG	1/2"	.020''	9,000'	300#	16"	3"	B
RS564-6HG	1/2"	.020''	9,000'	400#	16"	6"	B
RS565-6HG	1/2"	.026''	7,200'	500#	16"	6"	B,W
RS566-6HG	1/2"	.028''	7,200'	600#	16"	6"	B,W
RS582-8HG	1/2"	.013''	9,000'	250#	8"	8"	B,Y
RS583-8HG	1/2"	.020''	9,000'	300#	8"	8"	B,W
RS585-8HG	1/2"	.026''	7,200'	500#	8"	8"	B,Y
RS586-8HG	1/2"	.028''	7,200'	600#	8"	8"	B
RS5000-3	5/8"	.032''	2,200'	1050#	16"	3"	B
RS5311-3HG	5/8"	.035''	2,200'	930#	16"	3"	B
RS5311-6HG	5/8"	.035''	4,400'	930#	16"	6"	B

Polyester Strap

ITEM NO.	WIDTH	THICKNESS	FEET PER COIL	BREAK STRENGTH	CORE	FACE	COLOR
T450-6EG	3/8"	.022''	10,500'	450#	16"	6"	G-Embossed
T1616-6	3/8"	.020''	12,500'	450#	16"	6"	G
T475-6	3/8"	.022''	9,600'	475#	16"	6"	B,G,W
T1716-6	7/16"	.022''	10,500'	500#	16"	6"	G
T1717-6	7/16"	.025''	9,000'	600#	16"	6"	G
T1718-6	7/16"	.025''	9,000'	600#	16"	6"	G
T525-6EG	1/2"	.019''	10,500'	475#	16"	6"	B,G-Embossed
T610-3	1/2"	.020''	3,600'	610#	16"	3"	B,G
T610-6	1/2"	.020''	7,200'	610#	16"	6"	B,G
T610-6EG	1/2"	.023''	7,200'	610#	16"	6"	G-Embossed
T811-3	1/2"	.026''	2,900'	775#	16"	3"	B,G,W
T811-6	1/2"	.026''	5,800'	775#	16"	6"	B,G,W
T811-6EG	1/2"	.030''	5,800'	775#	16"	6"	G,W-Embossed
T1822-6	1/2"	.028''	6,500'	800#	16"	6"	G
T587-3	5/8"	.020''	2,850'	750#	16"	3"	B
T589-3	5/8"	.024''	2,200'	880#	16"	3"	B,G
T589-6	5/8"	.024''	4,400'	880#	16"	6"	B,G
T5812-3	5/8"	.031''	1,800'	1200#	16"	3"	B,G
T5812-6	5/8"	.031''	3,600'	1200#	16"	6"	B,G
T5813-6	5/8"	.033''	5,000'	1250#	16"	6"	B,G
T5814-6	5/8"	.034''	4,000'	1400#	16"	6"	G
T5814-6GAAR	5/8"	.040''	4,000'	1600#	16"	6"	G

This graph illustrates the differences that exist between polypropylene, controlled elongation, Ultraband and polyester strapping.

Elongation @ Break (600# Strap)

- Polypropylene 25%
- Controlled Elongation 13%
- PET 12%
- Ultraband 9%

Strap Color Codes

B	= Black	G	= Green
W	= White	OR	= Orange
C	= Clear	P	= Purple
BL	= Blue	S	= Silver
Y	= Yellow	DBL	= Dark Blue

Poly strapping is available in both hand grade and machine grade.

Samuel Strapping Systems

Polypropylene Strap - Machine Grade

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
8" ID X 6" Face - 28 Coils Per Pallet - 1 Coil / Box					
M1421EEC170T6	1/4"	.023	210#	17,000	Clear
M1421NEC170T6	1/4"	.023	210#	17,000	Clear
M3830EEB100T5	3/8"	.024	300#	10,000	Black
M3830EEC100T5	3/8"	.024	300#	10,000	Clear
M3830EEW100T5	3/8"	.024	300#	10,000	White
M1230EEB090T5	1/2"	.024	300#	9,000	Black
M1230EEC090T5	1/2"	.024	300#	9,000	Clear
M1230EEW090T5	1/2"	.024	300#	9,000	White
M1250EEW082T5	1/2"	.027	500#	8,200	White
8" ID X 8" Face - 24 Coils Per Pallet - 1 Coil/Box					
M0513EDW240S8	5mm	.017	130#	24,000	White
M0513EDY240S8	5mm	.017	130#	24,000	Yellow
M0617EGW200T2	6mm	.021	175#	20,000	White
M0620EGY180T2	6mm	.021	180#	18,000	Yellow
M0718EGU180T2	6.5mm	.027	220#	18,000	Blue
M0722EGU164T2	7mm	.026	220#	16,400	Blue
M1421EGW170T2	1/4"	.023	210#	17,000	White
M1421EGY170T2	1/4"	.023	210#	17,000	Yellow
M3830EGB129S9	3/8"	.024	300#	12,900	Black
M3830EGC129S9	3/8"	.024	300#	12,900	Clear
M3830EGW129S9	3/8"	.024	300#	12,900	White
M3830EGY129S9	3/8"	.024	300#	12,900	Yellow
M1230EGB099S9	1/2"	.024	300#	9,900	Black
M1230EGC099S9	1/2"	.024	300#	9,900	Clear
M1230EGW099S9	1/2"	.024	300#	9,900	White
M1230EGY099S9	1/2"	.024	300#	9,900	Yellow
M1240EGW089S9	1/2"	.026	400#	8,900	White
M1260EGB072S9	1/2"	.031	600#	7,200	Black
M1260EGW072S9	1/2"	.031	600#	7,200	White
9" ID X 8" Face - 24 Coils Per Pallet - 1 Coil/Box					
M0617EHY240T4	6mm	.021	175#	24,000	Yellow
M0620EHW200T4	6mm	.022	200#	20,000	White
M0620EHY220T4	6mm	.022	200#	22,000	Yellow
M0724EHY170T4	7mm	.023	240#	17,000	Yellow
M1421EHC170T4	1/4"	.023	210#	17,000	Clear
M1421EHW170T4	1/4"	.023	210#	17,000	White
M1421EHY170T4	1/4"	.023	210#	17,000	Yellow
M3826EHC129T3	3/8"	.024	260#	12,900	Clear
M3826EHW129T3	3/8"	.024	260#	12,900	White
M3830EHB129T3	3/8"	.024	300#	12,900	Black
M3830EHW129T3	3/8"	.024	300#	12,900	White
M3830EHC129T3	3/8"	.024	300#	12,900	Clear
M3830EHY129T3	3/8"	.024	300#	12,900	Yellow
M1123EHB099H6	11mm	.024	230#	9,900	Black
M1230EHB099T3	1/2"	.024	300#	9,900	Black
M1230EHW099T3	1/2"	.024	300#	9,900	White
M1230EHY099T3	1/2"	.024	300#	9,900	Yellow
M1235EHB099T3	1/2"	.026	410#	9,900	Black
M1241EHW099T3	1/2"	.026	410#	9,900	White
M1250EHB066T3	1/2"	.027	500#	6,600	Black
9" ID X 8" Face - 24 Coils Per Pallet - 2 Coils / Box					
M0722EHU164G2	7mm	.026	220#	16,400	Blue
11" ID X 7-1/2" Face - 24 Coils Per Pallet - 1 Coil/Box					
M1230EJW075S7	1/2"	.024	300#	7,500	White
M1241EJB075S7	1/2"	.026	410#	7,500	Black
M1241EJW075S7	1/2"	.026	410#	7,500	White
11" ID X 7-1/2" Face - 24 Coils Per Pallet - 2 Coils/Box					
M1418EJW131G3	1/4"	.024	180#	13,120	White
16" ID X 6" Face - 28 Coils Per Pallet - Individually Boxed					
M1240EMB089B8	1/2"	.026	410#	8,900	Black
M1250EMW082B8	1/2"	.027	500#	8,200	White
M1250EMC066B8	1/2"	.027	500#	6,600	Clear
M1250EMB072B6	1/2"	.027	500#	7,200	Black
M1260EMB072B8	1/2"	.031	600#	7,200	Black
16" ID X 6" Face - 28 Coils Per Pallet- Bulk Pack					
M1250EMB082B6	1/2"	.027	500#	8,200	Black
M1250EMW082B6	1/2"	.027	500#	8,200	White
M1260EMB072B6	1/2"	.031	600#	7,200	Black
M1260EMY072B6	1/2"	.031	600#	7,200	Yellow
M1275EMB055B6	1/2"	.0375	750#	5,575	Black

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
Low Elongation/Low Creep - 16" ID X 6" Face - 24 Coils Per Pallet - Bulk Pack					
M1271NMW072R6	1/2"	.033	700#	7,200	White
M1271NMY072R6	1/2"	.033	700#	7,200	Yellow
Jumbo Coils - 24" ID X 6" Face - 14 Coils Per Pallet					
M1260EPB095B5	1/2"	.031	600#	9,500	Black
M1260EPY095B5	1/2"	.031	600#	9,500	Yellow
M1262EPB095B5	1/2"	.033	650#	9,500	Black
M1262EPY095B5	1/2"	.033	650#	9,500	Yellow
M1275EPB080B5	1/2"	.0375	750#	8,000	Black

Polypropylene Strap - Hand Grade

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
8" ID X 8" Face - 24 Coils Per Pallet - 1 Coil/Box					
H1230EGB090C7	1/2"	.024	300#	9,000	Black
H1260EGB072C7	1/2"	.031	600#	7,200	Black
H5870EGB060C7	5/8"	.029	700#	6,000	Black
H3405EGB045C7	3/4"	.029	1000#	4,500	Black
16" ID X 3" Face - 28 Coils Per Pallet - 2 Coils/Box					
H1250EKB036B3	1/2"	.027	500#	3,600	Black
H1260EKB034B3	1/2"	.031	600#	3,400	Black
16" ID X 3" Face - 56 Coils Per Pallet - 2 Coils/Box					
H1230EKB045T9	1/2"	.024	300#	4,500	Black
H5870EKB028T9	5/8"	.029	700#	2,800	Black
16" ID X 6" Face - 28 Coils Per Pallet - 1 Coil/Box					
H1230EMB090T7	1/2"	.024	300#	9,000	Black
H1240EMB089T7	1/2"	.026	400#	8,900	Black
H1250EMB072T7	1/2"	.027	500#	7,200	Black
H1260EMB072T7	1/2"	.031	600#	7,200	Black
H1260EMY072Q9	1/2"	.029	600#	7,200	Yellow
H5870EMB060T7	5/8"	.029	700#	6,000	Black
Self-Dispensing Boxed Strap - 8" ID X 8" Face - 24 Coils Per Pallet - 1 Coil/Box					
D1230EGB090W6	1/2"	.024	300#	9,000	Black

Polypropylene - Power Tool Grade; Samuel's 7/16" PTG Series - 16" ID X 6" Face - 12 Coils Per Pallet - Bulk Pack

For use in Signode VFC, VFD, AED, VFL-2000, VXM-2000, AEC Tension Weld Tools and STD, WHD Hand Tools

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
H7640SMB120R2	7/16"	.021	400#	10,500	Black
H7650SMB090R2	7/16"	.025	500#	9,000	Black
H7660SMB077R2	7/16"	.030	600#	7,700	Black

Signode Polypropylene Equivalents

ITEM NO.	SIGNODE NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
Signode Polypropylene - 8" ID X 7-1/2" Face - 24 Coils Per Pallet - Bulk Pack						
For use in Signode Spirit and SP Series equipment						
M0512SDC260R5	LB113	5mm	.015	120#	26,000	Clear
M1420SDC167R5	SP216	1/4"	.018	200#	16,750	Clear
M1420SDY167R5	SP216	1/4"	.018	200#	16,750	Yellow
M1420SDC180R5	SP216	1/4"	.016	200#	18,000	Clear
M1420SDY180R5	SP216	1/4"	.016	200#	18,000	Yellow
M3828SDB120R5	SP616B	3/8"	.016	300#	12,000	Black
M3828SDC120R5	SP616C	3/8"	.016	300#	12,000	Clear
M3830SDB112R5	SP616	3/8"	.019	300#	11,250	Black
M3830SDC112R5	SP616	3/8"	.019	300#	11,250	Clear
M7640SDB090R5	SP719	7/16"	.021	400#	9,000	Black
M7640SDC090R5	SP719	7/16"	.021	400#	9,000	Clear
M7650SDB075R5	SP723	7/16"	.025	500#	7,500	Black
M7650SDC075R5	SP723	7/16"	.025	500#	7,500	Clear
Signode 7/16" Polypropylene - 16" ID X 6" Face - 12 Coils Per Pallet - Bulk Pack						
For use in Signode MCD Series equipment						
M7640SMB120R2	HD719	7/16"	.019	400#	12,000	Black
M7640SMC120R2	HD719	7/16"	.019	400#	12,000	Clear
M7650SMB090R2	HD723	7/16"	.023	500#	9,000	Black
M7650SMC090R2	HD723	7/16"	.023	500#	9,000	Clear
M7660SMB077R2	HD729	7/16"	.028	600#	7,700	Black
Signode 7/16" Polypropylene - 16" ID X 6" Face - 24 Coils Per Pallet - Flanged Bulk Pack						
M7650SMB090W8	HD723	7/16"	.023	500#	9,000	Black
Signode 1/4" Polypropylene - 4" ID X 6" Face - 30 Coils Per Pallet - Bulk Pack						
For Use In Signode MI Series Equipment						
M1414SAC200R7	LD213	1/4"	.014	145#	20,000	Clear
M1414SAY200R7	LD213	1/4"	.014	145#	20,000	Yellow
M1417SAC150R7	LD216	1/4"	.018	170#	15,000	Clear
M1417SAY150R7	LD216	1/4"	.018	170#	15,000	Yellow

Polypropylene is economical and light-weight strapping that can be used for a variety of bundling applications.

SAMUEL
Samuel Strapping Systems

CAROLINA STRAPPING
AND BUCKLES COMPANY

GatorSTRAP

Polyester Strap

There are many cost saving advantages and performance benefits associated through the use of polyester strapping. Manufactured to the tightest industry tolerances, polyester strapping is AAR approved for use with brick and lumber. It has excellent retained tension properties which makes it ideal for heavy duty loads that require good initial tension as well as retained tension, which keeps the strap tight around the load even if the package settles and shrinks in size.

Standard Polyester

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
16" ID X 3" Face – 28 Coils Per Pallet - 2 Coils/Box					
P1220SKB036J1	1/2"	.020	600#	3,600	Black
P1220SKT036J1	1/2"	.020	600#	3,600	T-Grn
P1225SKB029J1	1/2"	.025	725#	2,900	Black
P5825SKB023J1	5/8"	.025	900#	2,300	Black
P5825SKT023J1	5/8"	.025	900#	2,300	T-Grn
P5830SKT019J1	5/8"	.030	1100#	1,900	T-Grn
P5830SKB019J1	5/8"	.030	1100#	1,900	Black
16" ID X 6" Face – 28 Coils Per Pallet - Bulk Pack					
P3821SMT096H2	3/8"	.021	460#	9,600	T-Grn
P1220SMT090H2	1/2"	.020	600#	9,000	T-Grn
P1225SMT058H3	1/2"	.025	725#	5,800	T-Grn
P1230SMT065H3	1/2"	.030	875#	6,500	T-Grn
P1230WMT065H9	1/2"	.030	800#	6,500	T-Grn
P5830SMT038H2	5/8"	.030	1100#	3,800	T-Grn
P5835SMG040H2	5/8"	.035	1400#	4,000	O-Grn
P5835WMG040H9	5/8"	.035	1400#	4,000	O-Grn
P5840SMG040H2	5/8"	.040	1600#	4,000	O-Grn
P3440WMG030H9	3/4"	.040	1900#	3,000	Grn
16" ID X 6" Face - 28 Coils Per Pallet - 1 Coil/Box					
P1220SMB072H3	1/2"	.020	600#	7200	Black
P1225SMB058H3	1/2"	.025	775#	5,800	Black
P5825SMT044H3	5/8"	.025	900#	4,400	T-Grn
P5825SMB046H3	5/8"	.025	900#	4,600	Black

High Strength Polyester

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
16" ID X 6" Face - 28 Coils Per Pallet - Bulk Pack					
P3450SMG027B4	3/4"	.050	2500#	2,700	OP-Grn
P9040WMG024A2	1"	.040	2500#	2,400	T-Grn
P9050WMG018A2	1"	.050	3100#	1,800	OP-Grn

AAR Approved Material Section

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
16" ID X 6" Face - 28 Coils Per Pallet - Bulk Pack					
P5835XMG040H9	5/8"	.035	1400#	4,000	OP-Grn
P5840XMG040H9	5/8"	.040	1600#	4,000	OP-Grn
P3440TMG030H2	3/4"	.040	1900#	3,000	Grn

Embossed Polyester

ITEM NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
16" ID X 6" Face - 28 Coils Per Pallet - Bulk Pack					
P3820EMT125H2	3/8"	.020	420#	12,500	T-Grn
P1220EMT100H2	1/2"	.020	500#	10,000	T-Grn
P1227EMT082H2	1/2"	.027	675#	8,200	T-Grn
16" ID X 6" Face - 28 Coils Per Pallet - 1 Coil/Box					
P1223EMT082H3	1/2"	.023	600#	8,200	T-Grn
16"ID X 6" Face - 28 Coils Per Pallet - Bulk Pack					
X5835EMT042H2	5/8"	.035	1300#	4,200	T-Grn
X5840EMT040H2	5/8"	.040	1500#	4,000	T-Grn
X3440EMT030H2	3/4"	.040	1800#	3,000	T-Grn

Strap Color Codes

B = Black	Y = Yellow	O-Grn = Opaque
W = White	Grn = Green	Green
C = Clear	T-Grn = Transparent	
BL = Blue	Green	

Signode Polyester Equivalents

ITEM NO.	SIGNODE NO.	WIDTH INCHES	THICKNESS INCHES	BREAK STRENGTH	FEET /COIL	COLOR
Signode Type - Polyester 16" ID X 6" Face - 28 Coils Per Pallet - Bulk Pack						
P3819RMT137A2	1616LC	3/8"	.0195	425#	13,750	T-Grn
P7619RMT115A2	1716LC	7/16"	.0195	500#	11,550	T-Grn
P7620RMT105A2	1716	7.16	.020	500#	10,500	T-Grn
P7624RMT090A2	1718	7/16"	.025	650#	9,000	T-Grn
P1220WMT090H9	1818	1/2"	.020	600#	9,000	T-Grn
P1228WMT065H9	1822	1/2"	.028	800#	6,500	T-Grn
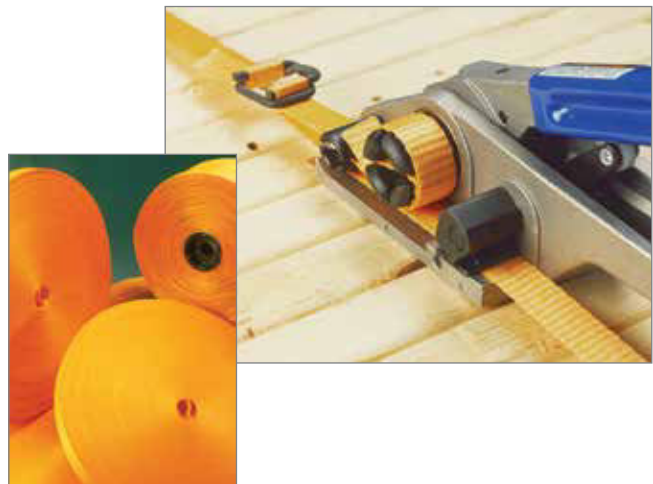
Woven Polyester Strapping

GatorSTRAP™ heavy duty strapping offers these advantages:

- Has no dangerous sharp edges to cut someone
- Is only 1/4 the weight of steel strapping
- Can be easily applied with our high friction buckles and retensioned if the load shifts during transit
- Has natural shock absorption, providing the ability to move with a dynamic load without breaking

ITEM CODE	DESCRIPTION	BREAK STRENGTH
2015	5/8" x 2000 ft. Medium Duty	1500#
2070	3/4" x 1650 ft. Medium Duty	2400#
2060	1-1/2" x 600 ft. Medium Duty	4700#
2010	5/8" x 2000 ft. Heavy Duty	2000#
2025	3/4" x 1650 ft. Heavy Duty	2700#
2040	1-1/4" x 600 ft. Heavy Duty	3285#
2055	1-1/2" x 600 ft. Heavy Duty	5400#

Buckles for GatorSTRAP™ - Phosphate Coated

ITEM CODE	DESCRIPTION	GAUGE
3005	16mm for 5/8" Strap	.138 Ga.
3020	19mm for 3/4" Strap	.157 Ga.
3025	19mm for 3/4" Strap	.177 Ga.
3035	32mm for 1-1/4", 1-1/2" Strap	.275 Ga.

Polyester strap offers many performance and cost saving benefits.

Poly Buckles, Seals and Strap Kit

PACKAGING SYSTEMS, INC.

SAMUEL Samuel Strapping Systems
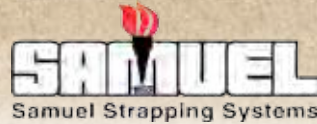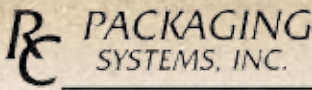
Why Would I Use Buckles Instead of Seals?

Plastic and wire buckles are used in low volume plastic strapping applications where cost is a factor. The manual operation requires no tools for securing the strap, only for cutting. The strapping is threaded through the buckle and tightened manually without the use of a tool.

Meanwhile, seals are used when the application is higher volume and requires a more secure fastening solution. Seals require the use of a manual or automatic sealer tool to attach. Unlike buckles, the strapping is threaded through the seal and tightened using a sealer.

Plastic Buckle Poly

Wire Buckle Poly

Open

Push-On

Serrated

Snap-On/Open

M Series
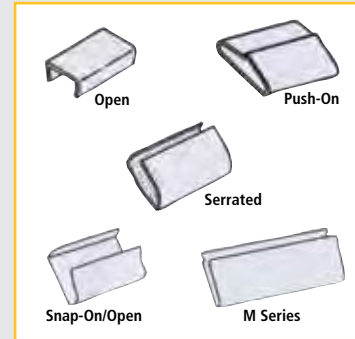
Buckles

DESCRIPTION	CTN CT
Wire Buckles - Regular Duty	
1/4" - 1/2" (6-13mm)	1000
5/8" (16mm)	1000
3/4" (19mm)	1000
Wire Buckles - Heavy Duty	
3/8" - 1/2" (10-13mm)	1000
5/8" - 3/4" (16-19mm)	1000
1-1/4" (32mm)	1000

DESCRIPTION	CTN CT
Plastic Buckles - Regular Duty	
1/4" - 1/2" (6-13mm)	1000
3/8" - 1/2" (10-13mm)	1000
5/8" (16mm)	1000

Buckles & Seals

Wire Buckle
Wire buckles are easy to use and self-lock when under tension in order to provide a secure seal. They are ideal for polypropylene and polyester strapping.

Plastic Buckle
Plastic buckles are lightweight, durable, and secure. They're easy to thread while being very slip-resistant.

Metal Seal
Special tools called sealers are used to crimp notches into metal seals, which bite into the plastic strap to form a secure hold that keeps the strapping in place.

Heat Seal
Plastic strapping such as polypropylene and polyester can be secured using the heat seal process. A hot knife heats two ends of the strap then joins them together to form a strong bond.

Friction Weld
Friction welds are created when a sealing tool rubs two ends of plastic strap together at extremely high speeds. This process fuses the two straps together and creates a strong seal.

Wire Buckle

Plastic Buckle

Metal Seal

Heat Seal

Friction Weld
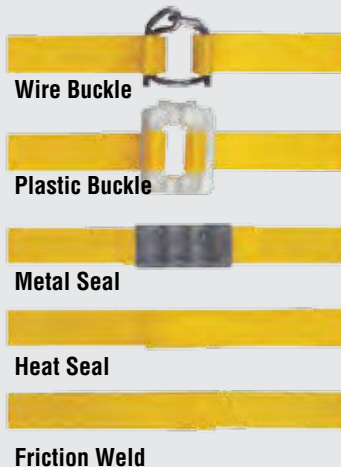
Poly Seals

Serrated and Standard Poly Seals

Serrated seals are designed with threads, or serrations, on the inside of the seal to grip polyester or polypropylene strapping. The threads prevent the strap from slipping inside the seal.

DESCRIPTION/SIZE	CTN CT	ITEM CODE
1/2" Seal	1000 or 2500	12-POLYSEAL
5/8" Seal	1000	58-POLYSEAL
1/2" Serrated Seal	1000	ORP2100.13
5/8" Serrated Seal	1000	ORP2300.16

Poly Strap Kit

A complete strapping station in a box! 3000 feet of 1/2" 350 lb. poly strap and 300 metal wire or plastic buckles, it's your choice. You also get a metal tensioner/cutting tool in a handy self-dispensing box!

Absolutely perfect for low volume users and out-of-the-way shipping departments. Strap, bundle, unitize - everything you need and full buckle instructions too!

DESCRIPTION/SIZE	ITEM CODE
3000' Light Duty Strap, 300 Wire Buckles, 1 Hand Pull Tensioner	SPW
3000' Light Duty Black Strap, 300 Plastic Buckles, 1 Hand Pull Tensioner	SPP-BLK
3000' Light Duty White Strap, 300 Plastic Buckles, 1 Hand Pull Tensioner	SPP-WHT

For replacement buckles, order HDB-4 (1/2" wire) or PLB-4 (1/2" plastic)

Buckles or seals? Ask your Account Manager which makes more sense for you.

Increase shop safety, reduce housekeeping problems and costs. Choppers and Scrap Converters dramatically cut man-hours used to discard steel and plastic strap, tubing, wire, cable, mild steel and, in many cases, turn it into saleable products.

Sweed Model 450WMXHD Wide Mouth Dual Drive Band Chopper

Featuring a 3-1/2" infeed opening, operation is easy. Just insert the strapping material into the infeed funnel and the feedworks (pinch rolls) will then grab the material and pull it into the rotating knife path. The feedworks will continue to pull at a rate of 106 feet per minute until the material is consumed or the operator releases the feedworks.

- Easy to reach feedworks release hand lever
- Infeed funnel with anti-kickback flap
- Knives can be rotated (4 times) for extended life
- Comes standard with 120v one-phase power supply; several other power supply options are available by request
- Accepts 3/8" x .064", 1/2" x .064", and 3/4" x .031" steel strap, and all sizes of plastic/PET strap

Sweed Model 450WMXHD Scrap Chopper

Sweed Model 510XHD Scrap Chopper

A great choice for high-volume conversion of plastic and metal strapping, mild steel flat bar, slitter-line trim, and other materials. For easy maintenance, the Model 510 has been designed with a hinged feed-works, making it an excellent choice for in-line placement to process slitter-line trim. The 510 can be ordered with air cylinder feedworks and safety detent foot switch. Ideal for heavy-duty applications.

- Infeed funnel with anti-kickback flap
- Both feedrolls are driven to enhance feeding
- Accepts 3/8" x .093", 1/2" x .087", 3/4" x .0625", 5/16" x .046", and 1" x .046" steel strap, and all sizes of plastic/PET strap

Sweed Model 510XHD Scrap Chopper

Mallard Machine Series 800, 500, 300 and 100 Scrap Saver Recycling Machines

Turn the cost of waste strapping disposal into a profit of saleable scrap. Scrap Saver machines chop waste wire and 3/4", 1-1/2" and 2" steel strap as well as all sizes of plastic strap into 3" pieces.

- Sealed heavy duty bearings
- Self feeding handy feed stop
- 8-way cutter blades

Highlight Poly Packer 2400

The Poly Packer Model 2400 is specifically designed to compact stretch film. It will reduce the volume of uncompacted stretch film by up to 90%!

- Bale Size: 24 inches wide by 24 inches deep by 24 inches high

Mallard Machine Scrap Saver

Highlight Shred-it-tor Corrugated Shredder

Model SD-1675 Standard Duty Corrugated Shredder
Model HD-1675 Heavy Duty Corrugated Shredder

The Highlight Shred-It-Tor shreds scrap corrugated cardboard into useful packaging material and will shred 16.75 inches of material and cut any additional width to be fed back into the Shred-It-Tor.

Highlight Poly Packer

Highlight Shred-it-tor

Samuel Strapping Systems

ORGAPACK

Manual Tools

**Regular Duty
Feedwheel Tensioner**

**Heavy Duty
Feedwheel Tensioner**

**Heavy Duty Feedwheel
Pusher Tensioner**

**Regular Duty
Pusher Type Tensioner**

**Windlass/Drum-Style
Tensioner**

> Refer to pages 32 for the strap dispenser carts.

**Regular Duty Sealer:
Front Action,
Single Notch, Up-Cut**

**Regular Duty Sealer:
Front Action,
Double Notch, Down-Cut**

**Heavy Duty Sealer:
Front Action,
Double Notch, Down-Cut**

**Heavy Duty Sealer:
Side Action,
Double Notch, Up-Cut**

Tensioners

Feedwheel Tensioners - Manual
- For general use on flat surfaces
- Regular duty features strap width range of 3/8" to 3/4" or 1/2" to 3/4"; strap gauge range: .015" to .025" or .028"
- Heavy duty features strap width range of 3/4" to 1-1/4"; strap gauge range: .015" to .025"

Feedwheel Push-Type Tensioners - Manual
- Heavy duty pusher type features strap width range of 5/8" to 1-1/4"; strap gauge range: .023" to .031"

Push-Type Tensioners - Manual
- For use on small or irregularly shaped surfaces
- Regular duty strap width range: 3/8" to 3/4"; strap gauge: .025"
- Heavy duty strap width range: 3/4" to 1-1/4"; strap gauge: .035"

Windlass/Drum-Type Tensioners - Manual
- For applications requiring high tension
- Heavy duty strap width range: 3/4" to 1-1/4"; strap gauge range: .031" to .044"

Sealers

Sealers - Regular Duty Manual
- Single notch, up cut, front action: strap 3/8", 1/2", 5/8" and 3/4" wide; strap gauge range from .015" to .023"
- Double notch, down cut, front action: strap 3/8", 1/2", 5/8" and 3/4" wide; strap gauge range: .015" to .023"
- Other models are available in single notch or double notch, up cut or down cut, front or side action
- Ideal for use on irregularly-shaped packages; use with push-type tensioners

Sealers - Heavy Duty Manual
- Single notch, down cut, side action: strap 3/4", 1" and 1-1/4" wide; strap gauge range from .025" to .035"
- Double notch, down cut, front action: strap 1/2", 5/8" and 3/4" wide; strap gauge range: .023" to .031"
- Double notch, up cut, side action: strap 3/4", 1" and 1-1/4" wide and strap gauge range: .025" to .035"
- Other models are available in single notch or double notch, up cut or down cut, front or side action
- Ideal for use on irregular-shaped packages; use with push-type tensioners

TR = RACK TYPE

TP = PUSH TYPE

TW = ROTARY TYPE

TD = DRUM TYPE
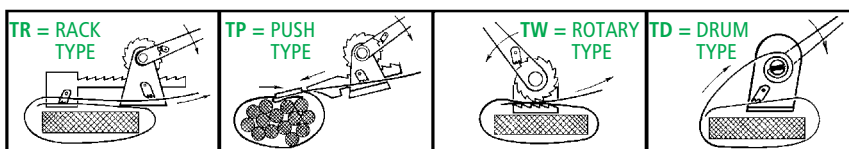
> **Many tool models are available from these and other suppliers.**

Protect your heavy shipments with strong steel strapping.

Samuel Strapping Systems

ORGAPACK
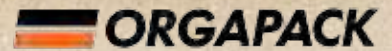
Manual Tools

Shears

Strap Cutters
- Regular duty steel strap cutter: strap width range 3/8" to 3/4"; strap gauge range .015" to .031"
- Heavy duty steel and poly strap cutter: strap width range 3/8" to 1-1/4"; strap gauge range: .015" to .035"

Regular Duty Steel Strap Shears

Heavy Duty Steel and Poly Strap Shears

Combo Tools
- Enables user to perform tensioning, sealing and cutting in one simple operation without the need for separate tools
- By eliminating metal seals, sealless systems provide significant cost savings

Regular Duty Seal-Type Combo Tool

Seal-Type - Regular Duty Manual
- Strap width range: adjustable from 3/8" to 3/4"; strap gauge range: .015" to .023"
- For use with regular duty steel strap only

Sealless - Regular Duty Manual
- Strap width range: adjustable from 3/8" to 3/4"; strap gauge range: .015" to .023"
- For use with regular duty steel strap only

Regular Duty Sealless Combo Tools

Sealless Tool with MicroLock - Regular Duty and High Tensile Manual
- Strap size: regular duty 3/8" x .015" to .020"; or high tensile 1/2" x .015" to .025", 5/8" x .015" to .025" and 3/4" x .015" to .025"

Regular Duty Sealless Combo Tool with MicroLock

MicroLock Sealless Seal

Pneumatic Tools

Sealers
- Strap size: 3/4" x .020" to .040"; 1-1/4" x .029" to .040"
- Pneumatic double up notch sealer; ideal for curved or irregularly shaped packages
- Uses a seal with a double notch up cut seal joint for maximum safety in a one stroke operation
- Used in conjunction with pneumatic tensioner

Tensioners
- Strap width range: 3/4" to 1-1/4"; strap gauge range: .025" to .050"
- Provides the extremely high tension required for heavy loads of metal, with a maximum tension of 1900 lbs.
- Used in conjunction with pneumatic sealer

Pneumatic Sealer

Pneumatic Tensioner

Push-Type Combination Tool
- Strap size: regular duty 3/8" x .015" to .020"; high tensile 1/2" x .020" to .023", 5/8" x .020" to .023" and 3/4" x .020" to .025"
- Pneumatic push type for round packages and irregular shapes
- Two buttons control the entire operation of tensioning, sealing and cut-off

Pneumatic Pusher-Type Combination Tool

Steel Strap

Ribbon Wound Coil

Oscillated Wound Coil

Steel Strap

WIDTH	THICKNESS	DESCRIPTION COIL WINDING	AVERAGE BREAK STRENGTH	FEET PER LB.	STRAP FINISH
Standard Duty					
3/8"	.015	OSC	675#	52.4'	W, P
3/8"	.020	OSC	900#	39.3'	W, P
1/2"	.015	OSC	900#	39.3'	W, P
1/2"	.020	OSC	1200#	29.4'	W, P
1/2"	.023	OSC	1380#	25.6'	W, P
5/8"	.015	OSC	1125#	31.4'	W, P
5/8"	.020	OSC	1500#	23.6'	W, P
5/8"	.023	OSC	1725#	20.5'	W, P
3/4"	.015	OSC	1350#	26.2'	W, P
3/4"	.020	OSC	1800#	19.6'	W, P
3/4"	.020	OSC, Punched	N/A	19.6'	W, P
3/4"	.023	OSC	2070#	17.1'	W, P
Ultra-Ten High Tensile					
1/2"	.017	OSC	1140#	34.9'	W, P
1/2"	.020	OSC	1450#	29.4'	W, P, Z
5/8"	.017	OSC	1440#	28.3'	W, P
5/8"	.020	OSC	1815#	23.6'	W, P, Z
3/4"	.017	OSC	1725#	23.6'	W, P
3/4"	.020	OSC	2175#	19.6'	W, P
3/4"	.023	OSC	2500#	17.1'	W, P
3/4"	.025	OSC	2700#	15.7'	W, P
Commercial Quality					
1/2"	.020	OSC	800#	29.4'	W, P
5/8"	.020	OSC	1000#	23.6'	W, P
3/4"	.020	OSC	1200#	19.6'	W, P
1/2"	.023	OSC	920#	25.6'	W, P
5/8"	.023	OSC	1150#	20.5'	W, P
3/4"	.023	OSC	1380#	17.1'	W, P

WIDTH	THICKNESS	DESCRIPTION COIL WINDING	AVERAGE BREAK STRENGTH	FEET PER LB.	STRAP FINISH
High Tensile					
1/2"	.020	OSC	1500#	29.4'	W, P, Z
1/2"	.023	OSC	1725#	25.6'	W, P, Z
5/8"	.020	OSC	1875#	23.6'	W, P, Z
5/8"	.023	OSC	2150#	20.5'	W, P, Z
3/4"	.020	OSC	2250#	19.6'	W, P, Z
3/4"	.022	OSC	2600#	17.5'	W, P, Z
3/4"	.025	OSC	2800#	15.7'	W, P, Z
3/4"	.029	OSC	3350#	13.5'	W, P, Z
3/4"	.031	OSC	3500#	12.7'	W, P, Z
3/4"	.035	RW	3900#	11.2'	W, P, Z
1"	.029	OSC	4400#	10.1'	W, P
1-1/4"	.025	RW	4650#	9.4'	W, P, Z
1-1/4"	.029	RW	5450#	8.1'	W, P, Z
1-1/4"	.031	RW	5500#	7.6'	W, P, Z
1-1/4"	.031	RW, Punched	5500#	7.6'	W, P, Z
1-1/4"	.035	RW, Punched	6780#	6.7'	W, P, Z
1-1/4"	.035	RW	5800#	6.7'	W, P, Z
1-1/4"	.044	RW	8350#	5.3'	P, Z
2"	.044	RW	12300#	3.3'	P, Z

OSC=Oscillated   RW=Ribbon Wound

W=Waxed   P=Painted   Z=Zinc

Many other sizes of steel strap are available.

Steel Strap

All steel strapping is coiled in either an oscillated pattern (the steel strapping is wound in a tight uniform pattern) or ribbon wound (the steel strapping is wound onto itself so that the width of the coil is the same as the strap).

Regular Duty Steel Strap is a low carbon steel strapping produced for general applications, such as package reinforcement, unitizing, bundling, palletizing and box closure, and is available in a number of different finishes.

Ultra Ten is specifically developed to provide our customers with a high quality, cost effective alternative to high carbon high tensile AAR-33 strapping. Ultra Ten is not suitable for applications such as open-top car loading.

High Tensile Steel Strap is manufactured for optimum results in every application. Specially blended cold rolled steel of a high carbon and manganese analysis is heat treated to ensure uniform tensile and elongation characteristics. Typical applications are unitizing compressed fiber bales, securing heavy steel coils and open-top railcar and trailer loading. High tensile strapping provides more footage per coil than heavy duty sizes of comparable break strength.

Painted and Waxed Steel Strapping features hard baked-on paint on both sides along with a wax coating. Painted strap is usually black, but other colors are available as well.

Unpainted and Waxed Regular Duty Steel Strapping is a low carbon product for many general applications. Unpainted strap is an economical alternative that offers similar characteristics as painted strap at a lower cost. In some cases unpainted strapping will even outperform painted strap.

Blued & Waxed is a mid carbon product for most general applications. The surface finish is blued over a flame rather than painted; bluing the steel burns off foreign material from the steel. Blued strap is an economical alternative that offers similar characteristics as painted strap at a lower cost.

Zinc/Epoxy Coated Strapping offers greater rust resistance than regular painted material, and is commonly used when prolonged outside storage is a must.

Steel strap comes in a variety of types and sizes; let us help choose the right one for you.

GENUINE
INTERCHANGE BRANDS, LLC
CONSTRUCTION SUPPLIES

SAMUEL
Samuel Strapping Systems

Open Seals
Also known as "snap-on" seals, these are put over the overlapping strapping ends prior to tensioning.
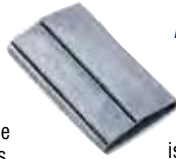
Push Type Seals
Also known as "overlap" seals and are pre-threaded and used when strap is tensioned by butting the nose of the push-type tensioner against the seal.

Closed Seals
Also known as "thread-on" seals. Strapping must be threaded through before tensioning.

Semi-Closed Seals
Heavy-duty version of the Open Seal, they have one open and one closed leg.

Steel Seals

Open Seals
Fast and easy to use, open seals can be placed over the strap before or after tensioning.

DESCRIPTION	CTN CT
3/8" Seals	2000
1/2" Seals	2000
5/8" Seals	2000
3/4" Seals	2000 or 5000

Push-Type Seals
The strap is pre-threaded through the seal prior to tensioning. An overlapping flange provides the required strength as the tensioner pushes against the edge of the seal.

DESCRIPTION	CTN CT
3/8" Seals	2000
1/2" Seals	2000
5/8" Seals	2000
3/4" Seals	2000
3/4" Heavy Duty Seals	2000 or 5000
1-1/4" Heavy Duty Seals	1000

Closed (Thread On) Seals
Also referred to as thread-on seals, the strap is pre-threaded through the seal prior to tensioning.

DESCRIPTION	CTN CT
3/4" Heavy Duty Seals	2000
1-1/4" Heavy Duty Seals	1000

Semi-Closed (Open Flange) Seals
Open flange seals are used for heavy duty or high tensile steel strapping. Their design allows placement over the strap before or after tensioning.

DESCRIPTION	CTN CT
3/4" Heavy Duty Seals	2000
1-1/4" Heavy Duty Seals	1000

All seals are regular duty unless otherwise noted. Many different sizes and styles also available.

Strap Caddy Steel Banding Kits

The Strap Caddy Kit is a complete portable steel strap solution. Ready to carry and use steel strap, tools, and seals in a carry-all dispenser. Perfect for low volume, occasional and satellite operations. Included tools: Tensioner (SST-34), Sealer (SSS-12 or SSS-34) and a Shear Tool (H51).

Tools are medium duty rated and mount in the Strap Caddy carrier with steel strap and seals. Tools, strap and seals are also available separately.

DESCRIPTION	ITEM CODE
1/2", 300-100 Open Seals-Tools-Stnd	SCFK12WT
3/4", 300-100 Open Seals-Tools-Stnd	SCFK34WT

Strap Caddy Steel Strap

Regular duty steel strap for the Strap Caddy. Available in 1/2", 5/8" and 3/4" sizes.

DESCRIPTION	GAUGE	ITEM CODE
1/2" x .020, 300 Ft/Box	.020	SC3-12
5/8" x .020, 300 Ft/Box	.020	SC3-58
3/4" x .020, 300 Ft/Box	.020	SC3-34

Strap Caddy Open Steel Seals

Open steel seals for the Strap Caddy come in 1/2", 5/8" and 3/4" sizes.

DESCRIPTION	CTN CT	ITEM CODE
1/2" Seals	100	OP12-100
5/8" Seals	100	OP58-100
3/4" Seals	100	OP34-100

Strap Caddy Tools

DESCRIPTION	GAUGE	ITEM CODE
Sealer, Economy Grade, 1/2"	.020	SSS-12
Sealer, Economy Grade, 3/4"	.020	SSS-34
Tensioner, Economy Grade, 3/4"	.020	SST-34
Shear, Economy Grade, 3/8" to 1-1/4"	.023	H51

Laminations — Great Northern Corporation   **IT Angleboard** — Protective Packaging Systems   **Caraustar**

Paperboard Corner and Edge Protectors

Protect your products during shipping, handling and storage.

Paperboard edge protectors are a simple product that solve a wide range of packaging problems. Made by laminating recycled paperboard into a rigid right-angle shape, they provide edge protection as well as load containment, stabilization and strengthening. Plus, they easily combine with other materials to create custom packaging solutions.

Paperboard edge protectors are available in a wide range of sizes, configurations and options that meet a wide spectrum of needs. Some paperboard edge protectors can also be customized with print options including CautionBoard, IdentiBoard, CuttingBoard and LibertyLine, or you can custom print with your logo, promotional tagline, handling instructions, product code or other information.

Many additional calipers and sizes are available either boxed or in skid quantities!

Paperboard Edge Protectors - Sizes

Paperboard edge protectors are available in a wide range of configurations: equal leg lengths of 2.0" x 2.0", 2.5" x 2.5", 3.0" x 3.0" and 4.0" x 4.0"; offset leg lengths of 1.0" x 3.0", 2.0" x 3.0" and 2.0" x 4.0"; lengths range from 2.5" to more than 24' and calipers from 0.090" to 0.500".

Paperboard Edge Protectors - Common Sizes

LIGHT DUTY (0.120 Caliper) SIZE	MEDIUM DUTY (0.160 Caliper) SIZE	HEAVY DUTY (0.225 Caliper) SIZE
2" x 2" x 12"	2" x 2" x 18"	2" x 2" x 12"
2" x 2" x 18"	2" x 2" x 24"	2" x 2" x 18"
2" x 2" x 24"	2" x 2" x 30"	2" x 2" x 24"
2" x 2" x 30"	2" x 2" x 36"	2" x 2" x 30"
2" x 2" x 36"	2" x 2" x 40"	2" x 2" x 36"
2" x 2" x 40"	2" x 2" x 42"	2" x 2" x 40"
2" x 2" x 48"	2" x 2" x 48"	2" x 2" x 48"
2" x 2" x 60"	2" x 2" x 60"	2" x 2" x 60"
2" x 2" x 72"	2" x 2" x 72"	2" x 2" x 72"
2-1/2" x 2-1/2" x 30"	2" x 2" x 84"	2-1/2" x 2-1/2" x 30"
2-1/2" x 2-1/2" x 36"	2" x 2" x 96"	2-1/2" x 2-1/2" x 36"
2-1/2" x 2-1/2" x 40"	2-1/2" x 2-1/2" x 30"	2-1/2" x 2-1/2" x 40"
2-1/2" x 2-1/2" x 48"	2-1/2" x 2-1/2" x 36"	2-1/2" x 2-1/2" x 48"
3" x 3" x 18"	2-1/2" x 2-1/2" x 40"	2-1/2" x 2-1/2" x 60"
3" x 3" x 24"	2-1/2" x 2-1/2" x 48"	3" x 3" x 12"
3" x 3" x 30"	3" x 3" x 12"	3" x 3" x 18"
3" x 3" x 36"	3" x 3" x 18"	3" x 3" x 24"
3" x 3" x 40"	3" x 3" x 24"	3" x 3" x 30"
3" x 3" x 48"	3" x 3" x 30"	3" x 3" x 36"
3" x 3" x 60"	3" x 3" x 36"	3" x 3" x 40"
3" x 3" x 72"	3" x 3" x 48"	3" x 3" x 48"
3" x 3" x 96"	3" x 3" x 60"	3" x 3" x 60"
	3" x 3" x 72"	3" x 3" x 72"

Laminations products:

VBoard® Edge Protection: VBoard edge guards and corner protectors are available in 80 sizes, in lengths ranging from 2.5" (6.35cm) to over 24' (7.31m) . Calipers range from .090" to .500" (.152 to 1.270cm).

VGuard® strap guard is a shorter version of their VBoard in lengths from 2.5" to 12" and provides targeted edge protection.

MegaVBoard®, the mega-sized VBoard corner and edge protector is available in sizes up to 9" x 9" (2" leg minimum) and a variety of leg lengths and calipers. It improves load containment and weight distribution for stronger, more secure pallet loads and enhances structural integrity for increased stacking strength, allowing pallets to be stacked higher without risking corner and edge damage.

PerfBoard™ - create the ideal height edge protection in a snap with perforated convenience.

Paperboard Corner and Edge Protectors are available in both white and kraft. Ask about the cost savings by purchasing kraft.

Caliper Gauge - 0.090" to 0.500"

.090	.120	.140	.160	.180	.200	.225	.250	.320	.400	.500	Inches
.229	.305	.356	.406	.457	.508	.572	.635	.813	1.016	1.270	Centimeters

Pallet edge protection helps to solve a wide range of shipping problems.

Laminations Great Northern Corporation • *ITW* **Angleboard** Protective Packaging Systems • **Caraustar** • **Pregis**
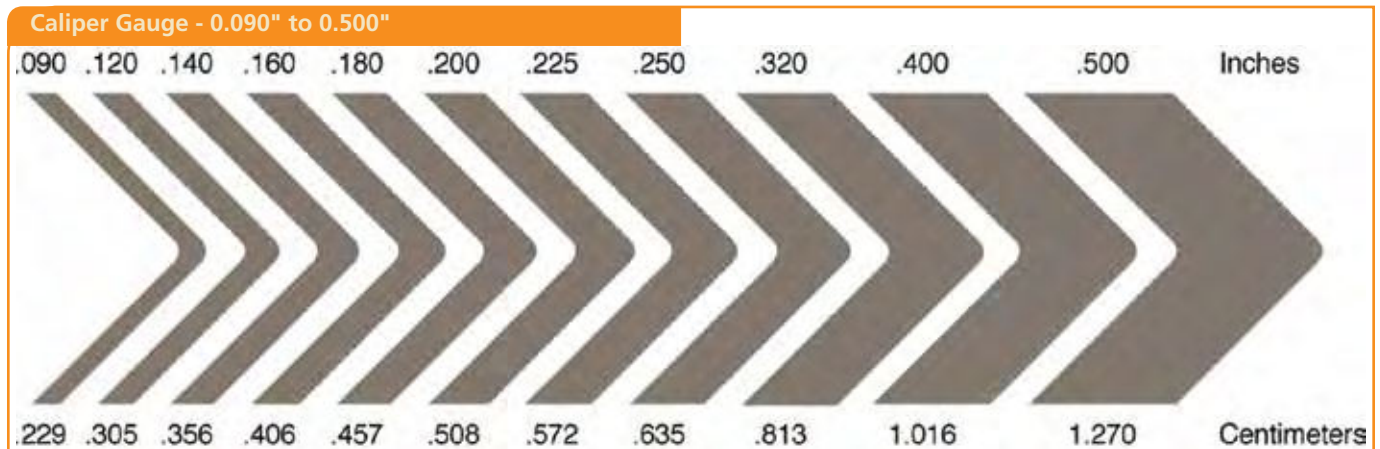
Pregis products:

ProFlex® foam edge and corner protectors provide surface and edge protection to limitless packaging applications.

- **EdgeFoam**® Protectors: flexible L- or U-shape channels enables the structure to wrap around corners, edges and asymmetrical shapes with a snug fit, conforming to just about any product contour.
- Withstand multiple impacts as well as constant vibration
- Excellent resiliency, flexibility and shape memory

ITW Angleboard products:

AngleBOARD® provides cardboard edge protection and enhances the stacking strength of palletized goods.

AngleWRAP® is an excellent replacement for wood packaging and it permits higher strap tension for tighter, more secure loads.

CornerBOARD™ is a high-strength, moisture resistant corner post made of recycled paper and plastic with a paper outer wrap.

FormaBOARD™ utilizes a unique manufacturing process to heat bond polycoated plies of paper, forming them into rigid right angles of exceptional strength. Formaboard enables the use of a thinner caliper and/or shorter leg length than with a standard open-edge product.

EcoEDGE is 100% recycled content and, like our **CornerBOARD™**, can be reclaimed, recycled and reused in the manufacturing of new EcoEdge.

StackMaster™ (not shown) is a corner post that increases its load-bearing strength, unitizes stacked loads, absorbs shock and prevents damage during package handling and transit.

Caraustar products:

Protect-A-Board protects the edges of palletized freight from strapping, stretch film, dents, abrasions and other damage associated with shipping and handling.

Protect-A-Wrap is formed at a 90-degree angle, then reinforced by wrapping the top ply of paper for added strength and a cleaner appearance. Improved stacking ability due to enhanced column strength and enhanced moisture protection.

Snap Right Perforated Edge Protectors - In seconds you can remove perforated portions of Snap Right to create the ideal height edge protection. Available in multiple segment lengths and leg sizes (1.5" x 1.5", 2" x 2", 3" x 3", 4" x 4").

Strap Protectors - Available in standard grade or machine grade to provide superior protection from strap damage.

Protect-A-Coil - Designed to protect inside and outside diameters of metal coils, rolls of fine paper and other irregularly palletized freight.

Protect-A-Flex offers the benefits of our popular Protect-A-Board but with mitered corners that reduces packaging labor and allows 90-degree turns that form a protective frame.

Paperboard Strap Guards

A cost-effective strap protector

A shorter version of the paperboard edge protectors, they provide protection from strapping damage on palletized loads or stacked products. This practical, economical strap protector is made to a high degree of precision to ensure the uniform shape and sizing required for automated application systems.

Paperboard strap protectors are available in lengths from 2-1/2 to 12 inches (6.35 to 30.48cm).

Paperboard Strap Guards

SIZE	CALIPER
2" x 2" x 3"	0.120
2" x 4" x 3"	0.120
2" x 2" x 6"	0.120
3" x 3" x 3"	0.120
2" x 2" x 3"	0.160
4" x 3" x 2"	0.160
4" x 4" x 2"	0.160
3" x 3" x 3"	0.160
3" x 3" x 6"	0.160
2" x 2" x 3"	0.225
2" x 2" x 6"	0.225
3" x 3" x 3"	0.225
3" x 3" x 4"	0.225
3" x 3" x 6"	0.225

Many other sizes are available.

Plastic Strap Guards

Protects steel strap from damaging boxes and crates by buffering the space between the strap and the edge of the box.

DESCRIPTION	SIZE
Plastic Edge Protector	3/4"
Plastic Edge Protector	1-1/4"

Stretch Wrap Machines

HIGHLIGHT INDUSTRIES, INC.

Turntable systems use a film carriage on a fixed mast to apply stretch film as it ascends and descends and rotates the load. This type of system can meet the needs of most applications. Semi-automatics are designed for use with a forklift (high profile turntable) or a pallet jack (low profile turntable) and automatics are normally used with a conveyor.

Predator® UX Low Profile Turntable

- 59" diameter turntable
- 4,000 lb. load capacity
- Front & rear forklift portable
- 48" ramp available

Other turntable-only models are available!

Predator UX-Low Profile Turntable

Predator SS Stretch Wrapper

Predator® SS Semi-automatic Turntable Stretch Wrapper with Simplified Stretch

The Predator SS is loaded with features including: top and bottom counters; photo eye; and two (2) wrapping modes. State-of-the-art INFO screen shows current machine operation and makes trouble-shooting easy. Simplified Stretch allows you to precisely adjust your film stretch and film force on your load with the turn of a knob. Ramp is also available.

- 80" wrap height capacity
- Available in both low profile and high profile models

Predator® XS Semi-automatic Turntable Stretch Wrapper

The Predator XS is designed with ground-breaking standard features that include: Select Stretch which allows you to quickly select from either 230% or 270% pre-stretch gear ratios; Allen-Bradley MicroLogix 1200 PLC; and fast film feed and automatic film cutting at the end of the wrap cycle.

- 80" wrap height capacity
- Available in both low profile and high profile models
- Hinged control box

Predator XS Stretch Wrapper

Predator® Platinum Fully Automatic Stretch Wrapper

The Predator Platinum wraps loads automatically with a simple pull of the lanyard cord, eliminating the need to have the operator attach the film at the beginning or cut and wipe the film to the load at the end of the wrap cycle. Loads can be wrapped up to 50% faster. The Predator Platinum is a true fully automatic system with built-in features that are not available on other simpler automatics.

Predator Platinum Stretch Wrapper

Fantom Robot Self-Propelled Stretch Wrapper

Highlight's battery operated self-propelled Fantom Robot is designed for ease of operation and safety. Includes touch screen controls as well as other function controls.

- Select Stretch offers two settings, 230% and 270%, changeable in less than a minute
- The guide wheel follows the contour of your pallet.
- Yellow safety bumper instantly stops the Robot when encountering an obstacle.

The Fantom Robot's Touch Screen and Function Controls

Digital Scale Display (Option)

The scale display is used on all Highlight machines equipped with a scale. This display system is mounted on the control panel tower using the stainless steel mounting bracket and includes an easy-to-read six digit display with 3/4" LED numbers.
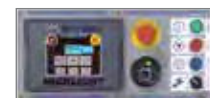
Fantom Robot Stretch Wrapper

There are many options available for the stretch wrap machines we sell.

Custom Wrapper with Belt Drive

Drive for Predator Series and Synergy .5, 1 and 1.5

Ring Bearing for Synergy Automatics

HP Turntable for Predator and Synergy Series

Many cost effective and efficient systems are available for your stretch wrap solutions.

HIGHLIGHT
INDUSTRIES, INC.

Synergy™ 2 Semi-automatic Stretch Wrapper with Dual Hydro-Stretch

The Synergy 2 with Dual Hydro-Stretch delivers more load-holding strength than any other stretch wrap system available! The fast 12 RPM turntable wraps your load quickly. The Allen-Bradley PLC with three unique wrapping patterns insures reliability and flexibility.

Synergy™ 2.5 Semi-automatic Dual Stretch Wrapper

Reliable Pre-Stretch Performance - Standard features of the high profile model include: 12 RPM, 3 built-in wrap programs, film assist, and wrap height to 72" for high profile (HP) or 80" for low profile (LP) model. The low profile model is available with an optional ramp.

- Fixed gear pre-stretch 200% standard; other gear sets available.

Synergy 2 Stretch Wrapper

Synergy 2.5 Dual High Profile Stretch Wrapper

Synergy™ 3 Semi-automatic Stretch Wrapper with Dual Power Hydro-Stretch

Dual Power Hydro-Stretch allows users to dial in the level of stretch on their film from 0 – 400% to adapt to any stretch film and deliver the maximum performance from that film. The flexibility of five wrapping patterns will unitize any load most efficiently. Low profile model is available.

Synergy 2.5 and 3 Low Profile Chain Drive

Synergy 3 Stretch Wrapper

Freedom™ 6500 Fully Automatic Stretch Wrapper

Any load that can be conveyed can be easily wrapped with the Freedom 6500 Automatic Rotary Arm Stretch Wrapper. Platform Automatic models are also available. CHOOSE any film and stretch it to its maximum performance level with Highlight's exclusive Dual Power Hydro-Stretch!

Freedom 6512 Semi-automatic Stretch Wrapper

Wrapping Specifications
- 52" x 52" x 84" high load capacity
- Load height photosensor
- Film lowers to 1½" from floor
- 20" film capacity by 10" O.D.
- Adjustable film force
- Fixed gear pre-stretch 200% standard; other gear sets available.

Freedom 6500 Stretch Wrapper

Freedom 6512 Stretch Wrapper

Revolver Standard Orbital Stretch Wrapper with Conveyors & Platens

The Revolver™ orbital stretch bundling system protects your products with the right size equipment, the right level of automation, a custom design to meet you exact needs, and all the features you'll need.

- Eight different standard, semi-automatic and auto-matic models available with three different control systems, with or without conveyors

Highlight offers a wide variety of ring sizes to choose from, available in both semi-automatic and automatic control options. Many other models are available.

Revolver 6010 Orbital Stretch Wrapper

Freedom Drive Gear, Pinion and Motor

orion®

Flex turntable stretch wrappers are available in these configurations, both low and high profile:

Sentry Stretch Wrapper

Flex LPS Series Stretch Wrapper

Flex LPD Series Stretch Wrapper

Semi-automatic Pallet Wrappers

Standard
The Flex S Series offers just the features you need. Ideal machine for light to medium duty applications.

Deluxe
The Flex D Series is the semi-automatic workhorse. D models are for medium to higher speed applications.

Automatic
Flex A Series machines offer maximum efficiency and economy by automating the film tail process.

Sentry
Sentry machines are entry level, semi-automatic wrapping machines for economical and efficient unitization of pallet loads with stretch film.

Sentry Low Profile Stretch Wrapper

The Sentry is an entry level, semi-automatic, low profile turntable style wrapping machine that can lower film cost per load, especially compared to manually applying stretch film by hand.
- Wraps pallet loads up to 52" x 52" x 80"H, weighing up to 4,000 pounds
- Low profile, 60" round turntable
- Variable turntable speed: maximum 9 RPM
- 200% film pre-stretch reduces film cost and increases film strength
- Carriage accepts 20" wide stretch film up to 95 gauge thickness

These machines are available with many different options to fit your application needs!

Flex S Series Standard Stretch Wrapper

LPS Low Profile Standard or HPS High Profile Standard
The LPS and HPS have been designed to provide the same standards of durability, reliability and performance as the rest of the Flex line, yet at an affordable price.
- Wraps pallet loads up to 55" x 55" x 80"H, weighing up to 4,000 lbs.
- Low profile: 63" round turntable; high profile: 48" x 48" turntable
- 12 RPM variable speed with "soft-start"
- The S Series includes the InstaThread film delivery system which elongates film 260% prior to delivery to the load.
- The InstaThread features an ultra-sensitive corner compensation mechanism to assure that film tension around the entire load is consistent for better load stability.
- For applications using only fork lifts, we recommend a high profile model such as the Flex HPS.

Flex HPS Series Stretch Wrapper

Flex D Series Deluxe Stretch Wrapper

LPD Low Profile Deluxe or HPD High Profile Deluxe
Built for the most demanding industrial environments.
- Wraps pallet loads up to 55" x 55" x 80"H, weighing up to 5,000 lbs.
- Low profile: 63" round turntable; high profile: 48" x 48" turntable
- 15 RPM variable speed with "soft-start"
- The Flex D Series features a durable steel framework and a heavy-duty turntable support system.
- D Series machines include the 260% (standard) Insta-Thread film delivery system.
- Forklift portable from front or rear
- High efficiency 260% powered film pre-stretch

Flex HPD Series Stretch Wrapper

Flex HPD High Profile Turntable
Flex HPD high profile offers reliable chain drive, a heavy duty steel frame and 8 industrial casters for turntable support.

Flex A and D LP
Flex A and D low profile models feature a heavy duty steel base with structural fork tubes that run the length of the machine.

Insta-Cut
The Insta-Cut option boosts production by eliminating the need for operators to manually sever the film web at the end of the cycle.

Insta-Thread Film Delivery System
With the Insta-Thread Film Delivery System, the stretch wrap machines help to reduce cost with every load that's wrapped. With a standard film pre-stretch rate of 260% you'll not only save money by using less film, the film on the load will be stronger, so loads are securely wrapped for storage or shipping.

orion®

Automatic Pallet Wrappers

Flex A Series Automatic Stretch Wrapper
LPA Low Profile Automatic or HPA High Profile Automatic
Flex A models eliminate the need for operators to attach and cut the stretch film. Simply place the pallet load on the machine, and pull a lanyard switch while backing away. The machine will perform the entire wrap cycle automatically without the need for an operator to tie the film tail to the load at the beginning of the cycle, and detach it at the end.
- Wraps pallet loads up to 50" x 50" x 80"H, weighing up to 5,000 lbs.
- Low profile, 63" round turntable; high profile 48" x 48" turntable
- 15 RPM variable speed with "soft-start"
- High efficiency 260% powered film pre-stretch

Flex LPA Series Stretch Wrapper

Flex HPA Series Stretch Wrapper

FA Turntable Automatic Stretch Wrapping System
Offers Category 2 Safety Rating as standard equipment, not an option. As part of Category 2 Safety Rating you'll find full surround 8 foot high steel mesh fencing with interlocked access points as well as infeed and exit light curtains with electronic muting.
- Wraps pallet loads up to 48" x 48" x 80"H, weighing up to 4,000 lbs.
- Heavy duty chain & sprocket turntable drive
- 15 RPM variable speed with "soft-start"
- Air knife eliminates hanging film tail
- AC Motors with Allen Bradley Power Flex VFD
- 260% Insta-Thread pre-stretch

FA Stretch Wrapper

MA Series Automatic Rotary Tower Stretch Wrappers
- Wraps pallet loads up to 48" x 48" x 80"H, weighing up to 4,500 lbs., 6,000 lbs. optional
- Variable speed with "soft-start"
- Insta-Thread™ film delivery systems with 260% pre-stretch
- Automatically adjusts for various load heights
- AC Variable Frequency Drive for reliability and easy maintenance

MA-ST (Standard 12 RPM)
With many of the same components as the DX and X, the MA-ST is one of the best values in automated stretch packaging.

MA-DX (Deluxe 18 RPM)
Can be configured with a wide variety of options to create a packaging system suited to your application.

MA-X (30 RPM)
Offers the highest speeds with a specially designed A-shaped frame structure to withstand demanding applications.

MA-ST Stretch Wrapper

Flex RTA Rotary Tower Automatic Pallet Wrapper
The RTA semi-automatic stretch wrapping system is the fastest way to boost your end-of-line packaging efficiency by eliminating the need for operators to manually attach the film tail to the load, then cut and secure the film tail at the end of the cycle. The RTA stretch wrapper automatically performs these functions so your operators simply place the load, pull a handing lanyard to start the cycle, and attend to other duties. When they return the load is securely wrapped and ready to be removed.
- 16 RPM variable speed tower
- Maximum load size: 48"W x 48"L x 80"H
- Standard pre-stretch ratio: 260%

RT Drive System

RTA Stretch Wrapper

Other Popular Flex Series Options

The split base option is used with oversized loads. This option can be combined with the scale option to provide an accurate load weight.

The motorized top platen option is ideal for unstable loads. The platen lowers to press down on the top of the load while wrapping.

The gravity conveyor option allows for integration with infeed and exit conveyor for easy roll-on, roll-off load movement.

The dual turntable option, available for high or low profile models, increases efficiency by allowing simultaneous load staging and wrapping.

Machine Grade Stretch Film

Standard Performance - Machine Film

- Alpha Series (A1) – Standard performance cast two-sided cling film for up to 275% stretch. For A, B and some C loads.
- Alpha Series (ADC) – Standard performance cast, two-sided cling film for up to 225% stretch. For A and B loads.
- Performance Plus (PP) – High performance blown two-sided cling film for up to 275% stretch. For A, B and C loads.
- Pro5 E Series (E) – High performance excellence cast one-sided cling film available in 63 and 71 gauge for up to 230% stretch. For A, B and C loads.

Ultra-High Performance - Machine Film

- Advantage (ADU) – High performance cast one-sided cling films for up 275% stretch. For A, B and C loads.
- Excalibur (EXP) – High performance cast one-sided cling films for up 275% stretch. For A, B and C loads.
- SuperMicron (XR) – Ultra high performance cast with outside slip surface. High load containment and puncture resistance compared to much heavier films. 63 gauge stretch performance up to 300%. Available in 98 to 37 gauge.
- SuperMicron (XRPLUS) – Ultra high performance cast with outside slip surface.

Similar to XR with high stretch percentages at lower gauges. 42 gauge stretch performance of up to 250%; 47 gauge up to 275%; and 52 gauge up to 300%.

- ST Film – Superior three-layer blown, co-extruded film that provides remarkable strength, puncture resistance with excellent cling. Formulated to exceed pre-stretch levels of 250 to 300%. Good for B and C type loads.
- AccuWrap (AW) – Three-layer blown stretch film that is puncture and tear resistant and offers exceptional cling. High pre-stretch for superior containment–up to 300%–for greater control and economies in usage.

Cast Machine Film

Quiet, clear, high performance, excellent puncture. Good for A, B and C type loads, with good cling.

ITEM NUMBER	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
A1 Cast Machine Std Perf 2 Side Cling				
A12050SNS	12.7	50	20	9000
A12060	15.2	60	20	7500
A13060	15.2	60	30	7500
A12063SNS	16	63	20	6000
A12070	17.8	70	20	6500
A13070	17.8	70	30	6500
A12075	19	75	20	5000
A12080	20.3	80	20	6000
A12080BXSNS	20.3	80	20	6000
A12080L5	20.3	80	20	5000
A12080UV	20.3	80	20	6000
A13080	20.3	80	30	6000
A12090	22.9	90	20	5000
A13090SNS	22.9	90	30	5000
A120115	29.2	115	20	3750
A120120SNS	30.5	120	20	4000
ADC Cast Machine Std Perf 2 Side Cling				
ADC6020V	15.2	60	20	7500
ADC7020V	17.8	70	20	6000
ADC7520V	19	75	20	5000
ADC8020V	20.3	80	20	5500
ADC8020V5	20.3	80	20	5000
ADC8030V	20.3	80	30	5500
ADC9020V	22.9	90	20	5000
ADC11520V	29.2	115	20	3500
ADU Cast Machine High Perf 1 Side Cling				
ADU14020V	14	55	20	8000
ADU14030V	14	55	30	8000
ADU15220V	15.2	60	20	7500
ADU15230VSNS	15.2	60	30	7500
ADU16520V	16.5	65	20	6500
ADU16530V	16.5	65	30	6500
ADU17820V	17.8	70	20	6000
ADU17830V	17.8	70	30	6000
ADU19020V	19	75	20	6000
ADU19030V	19	75	30	6000
ADU20320V	20.3	80	20	5500
ADU20330V	20.3	80	30	5500
ADU20312VSNS	20.3	80	12	5500
ADU22930VSNS	22.9	90	30	5000
ADU22920V	22.9	90	20	5000
ADU26720V	26.7	105	20	4250
ADU29220V	29.2	115	20	3500
ADU29230VSNS	29.2	115	30	3500

	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
EXP Cast Machine High Perf 1 Side Cling				
EXP2050	12.7	50	20	9000
EXP50014	14	55	19.7	8725
EXP2060	15.2	60	20	7500
EXP3060	15.2	60	30	7500
EXP500165	16.5	65	19.7	7385
EXP500178	17.8	70	19.7	6000
EXP2070	17.8	70	20	6500
EXP750178	17.8	70	29.5	6000
EXP3070	17.8	70	30	6500
EXP50019	19	75	19.7	6400
EXP2080	20.3	80	20	6000
EXP3080	20.3	80	30	6000
EXP2090	22.9	90	20	5000
EXP3090	22.9	90	30	5000
EXP20100	25.4	100	20	4500
EXP20115	29.2	115	20	3750
EXP30115	29.2	115	30	3750
PRO5E Cast Machine High Perf 1 Side Cling				
E50016	16	63	19.7	5000
E75016SNS	16	63	29.5	5000
E50018	18	71	19.7	5000
XR Cast Machine High Perf 1 Side Cling Slip				
XR50013	13	51	19.7	7500
XR2051	13	51	20	9000
XR75013	13	51	29.5	7500
XR500145	14.5	57	19.7	6500
XR2060	15.2	60	20	7500
XR50016	16	63	19.7	6000
XR2063	16	63	20	7250
XR75016	16	63	29.5	6000
XR50018	18	71	19.7	5500
XR75018SNS	18	71	29.5	5500
XR50020	20.1	79	19.7	5000
XR75020SNS	20.1	79	29.5	5000
XR50022	22.1	87	19.7	4500
XR50025	24.9	98	19.7	3750

Cast Film Properties
- Consistent cling
- Excellent clarity and gauge control
- Glow
- More resistance to tearing
- Excellent optics
- Quiet unwind
- Consistent film thickness

Blown Film Properties
- Tougher, greater puncture resistance
- High force on load; stiff
- Hazy and dull
- Excellent performance without pre-stretch and in cold temperatures
- Normally noisy unwind

	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
XRP Cast Machine High Perf 1 Side Cling				
XRP2042	10.7	42	20	10000
XRP3042	10.7	42	30	10000
XRP2047	11.9	47	20	9000
XRP3047	11.9	47	30	9000
XRP2052	13.2	52	20	8000
XRP3052	13.2	52	30	8000

Blown Machine Film

Loud release, high performance, excellent puncture. Good for A, B and C type loads, with excellent cling.

ITEM NUMBER	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
PP Blown Machine Std Perf 2 Side Cling				
PP2070SNS	17.8	70	20	6500
PP2080BL	20.3	80	20	5000
PP2080	20.3	80	20	6000
PP2080L5	20.3	80	20	5000
PP3080SNS	20.3	80	30	6000
PP2090SNS	22.9	90	20	5000
UV20100	25.4	100	20	5500
PP20120	30.5	120	20	3750

Silent unwind and clarity that is usually only found in cast films. Proven to withstand the sharp, abrasive corners and edges.

ST Blown Machine High Perf 1 Side Cling				
ST-2016	16	63	19.7	7500
ST-2018	18	71	19.7	6000
ST-2020	20	79	19.7	6000
ST-2023	23	91	19.7	5200
ST-2027	27	106	19.7	4500
ST-3018	18	71	29.5	6000
ST-3020	20	79	29.5	6000
ST-3027	27	106	29.5	4500

Great consistency and strength for difficult loads with high level of puncture resistance.

AW Blown Machine High Perf 1 Side Cling				
AW-2055	14	55	20	8000
AW-2075	19	75	20	6000

Has your company looked at Right Gauging recently? Let us help you stretch your packaging dollars!

Stretch film protects pallet loads from weather, theft, and improper strapping. It can also be used to protect furniture, machines, equipment – almost anything you can think of!

Stretch film is tough, puncture-resistant, clings to itself and it conforms to any shape. Hand stretch film can be used anywhere – on your production line, in your trucks, at your staging area or on your loading dock.

Standard Performance - Hand Film

- Handwrap (ADW) – Cast film clarity with extra stiffness and strength.
- Handwrap (HW) – Blown film strength, with the flexibility and strength to meet all your application requirements.
- Handwrap (HH) – Cast film clarity with maximum stretch capability.

Ultra-High Performance - Stiff Handwrap

- Pre-stretched (LX, X2S and X2W) – High performance with ease of use and most economical choice. Pre-stretch hand wrap is available in cast, too.
- SuperMicron Handwrap (XH) – The ultimate CAST handwrap. A combination of load containment, toughness, puncture, stiffness, and cling.
- SuperMicron Handwrap (XB) – The ultimate BLOWN handwrap. A combination of load containment, toughness, puncture, stiffness, and cling.

Contact your account manager for help choosing the right film for your application.

Stretch netting can be found on page 71.

Footage per roll varies by supplier.

Cast Hand Film

Quiet, clear, good puncture and good cling. Four rolls per carton.

ITEM NUMBER	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
ADW CAST HAND STD PERF 2 SIDE CLING				
ADW13016L15	13	51	16	1500
ADW13018L15	13	51	18	1500
ADW14516L15	14.5	57	16	1500
ADW14518L15	14.5	57	18	1500
ADW165133	16.5	65	13.3	1500
ADW16516	16.5	65	16	1500
ADW16518	16.5	65	18	1500
ADW165138	16.5	65	13.8	1500
HH CAST HAND STD PERF 2 SIDE CLING				
HH1570	17.8	70	15	1500
HH1870	17.8	70	18	1500
HH1580	20.3	80	15	1500
HH1880	20.3	80	18	1500
HH1890	22.9	90	18	1500
Q8 CAST HAND SPEC PERF 2 SIDE CLING				
SW207050	17.8	70	20	1000
SW208050	20.3	80	20	1000
XH CAST HAND HIGH PERF 2 SIDE CLING				
XH406102	10.2	40	16	2000
XH32512	12	47	12.8	1476
XH40612	12	47	16	2000
XH40612WB	12	47	16	1476
XH45712WB	12	47	18	1476
XH40615SNS	15	59	16	1476

Many other sizes of hand film are available. We can help you choose the right film for your application.

Blown Hand Film

Loud release, excellent puncture and excellent cling. Four rolls per carton.

ITEM NUMBER	MICRON	GAUGE	ROLL WIDTH	ROLL LENGTH
XTREME BLOWN HAND PRE-STRETCHED 2 SIDE CLING				
LX15B	7.6	30	15	2000
LX18B	7.6	30	18	2000
HW BLOWN HAND STD PERF 2 SIDE CLING				
HW1860	15.2	60	18	2000
HW1570	17.8	70	15	1500
HW1870	17.8	70	18	1500
HW1575SNS	19	75	15	1500
HW1875	19	75	18	1500
HW380	20.3	80	3	1500
HW BLOWN HAND STD PERF 2 SIDE CLING				
HW580	20.3	80	5	1500
HW1280	20.3	80	12	1500
HW1580BL	20.3	80	15	1500
HW1580	20.3	80	15	1500
HW1880BL	20.3	80	18	1500
HW1880	20.3	80	18	1500
HW1890	22.9	90	18	1500
HW18120	30.5	120	18	1000
X2 BLOWN HAND PRE-STRETCHED 2 SIDE CLING				
X2S1500	8.6	34	15	1500
X2S2000B	8.6	34	15	2000
X2W1500	8.6	34	17.2	1500
X2W2000B	8.6	34	17.2	2000
XB BLOWN HAND HIGH PERF 2 SIDE CLING				
XB325114	11.4	45	12.8	2000
XB40613	13	51	16	1500
XB45713	13	51	18	1500
XB406165	16.5	65	16	1500

Stretch Tape

Stretch Tape is the stretch film that adheres only to itself, leaving no gooey residue or marred finishes. And it won't tear off the printed surface of a package, as sticky tape will. It's just a fraction of the cost of strapping tape, twine or wire, plus the considerable savings in time and no damage to product.

Choose from a wide variety of weights, widths and colors.

Stretch Film Dispensers

Just slide a roll onto these handy stretch film dispensers and make the task of applying film a lot easier!

Many other models are available.

EP-800
- Pistol Grip
- Range of 12" - 20"
- Base Stabilizer
- Roller Bearing Design for Tension Control

EP-810
- Pistol Grip with T-Handle
- Range of 12" - 20"
- Base Stabilizer
- Roller Bearing Design for Tension Control

EP-820
- Ball Grip
- Range of 12" - 20"
- Base Stabilizer
- Roller Bearing Design for Tension Control

Bishamon® KPC-Master's Craft

KPC-Master's Craft SpaceSaver™ 180 Conveyor

The SpaceSaver non-powered conveyor is specially designed for light or small objects. It saves space and labor by automatically returning the item to the operator. A compact 180° turnaround conveyor, the SpaceSaver 180 is great for product return and accumulation.
- Works with most shrink packaging equipment or accumulating systems
- Comes standard with 36" straight length telescoping legs for adjustable height and leveling feet
- 110v variable speed drive models are available

SpaceSaver 180 Conveyor

Bishamon EZ Loader

EZ Loaders are true ergonomic tools. They are designed to eliminate worker bending by automatically raising and lowering pallets during loading or unloading without the use of mechanical springs. EZ Loaders also allow easy pallet rotation so the worker does not have to reach or strain. As the load weight changes, the EZ Loader automatically adjusts, keeping the top of the load at a convenient working height.
- Platform height: 8-3/4" (lowered), 30" (raised)
- Rotator ring diameter: 43"; base frame: 50-1/2" L x 30" W
- Weight capacity: 250 lbs. to 4000 lbs.

EZ Loader

Bishamon MobilLift™ BX Lift Tables

MobiLift™ scissor lift tables are rugged industrial lift tables with push-bars and casters. BX Series lift tables provide improved ergonomics by placing the load at a convenient work height while providing the mobility to locate the lift where it is needed. Over 15 models available; weight capacity ranges from 330 to 1100 lbs.
- Raised platform height ranges from 28.8" to 63.2"

MobilLift BX Lift Tables

Bishamon BS Series Hand Trucks

Pallet trucks are easy to use and exceptionally durable. Designed and manufactured to easily move palletized loads. By utilizing quality components and manufacturing techniques, Bishamon's BS Series pallet trucks are completely rebuildable and offer many extra years of valued service.
- Over 10 models available; weight capacity ranges from 2500 to 6500 lbs.

BS Hand Trucks

Bishamon EZ Off® Lifter Floor Level Pallet Positioner

The lowest floor level pallet positioners with rotating platforms for loading/unloading with a pallet truck!

Provides electro-hydraulic control of the lift platform from the fully raised to the fully lowered position. The controls allow the operator to adjust the top of the load to a convenient working height. The EZ OFF Lifter may be used for both loading or unloading applications.
- Maximum weight capacity: 2000 lbs.; maximum pallet size: 44" x 48"
- Height: 1-3/4" (lowered) x 30" (raised)
- Loads can be put on or taken off with a pallet jack or fork lift
- Rear leveling feet (Model EZO-25E)
- Model EZO-25E-3S provides three ramp position options

EZ Off Lifter

Bishamon UniLift™ Pallet Lifter and Transporter

The only pallet handler that can lift & transport a standard pallet without straddling it!!
- Can be used with standard GMA pallets, 48" x 40" CHEP pallets or skids
- Dual-purpose product allows for both transport and load lifting
- Lifting fork height up to 36"
- Lift capacity up to 2000 lbs.

Skid lifts are also available.

EZ UniLift

GENUINE INTERCHANGE BRANDS, LLC CONSTRUCTION SUPPLIES **ROLAIR** SYSTEMS **SENCO**® **HITACHI** **MAX**®
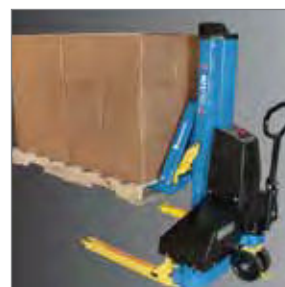
The industrial fastening field covers many areas. In the shelter industries there are furniture, cabinets, millwork applications as well as the manufactured home needs. In packaging there are the obvious pallet building, crating and boxes required by many manufacturers. The field broadens to include recreational vehicles, boats and product assembly of all kinds.

Serving the needs of industrial fastening requires a great deal of knowledge and experience. We have been finding the products and the answers to a great variety of fastening needs since 1947. These solutions are based on recommendations that consider the following questions:

What materials are involved?
What is the most economical method?
What fastener strength and life span is required?
What appearance or aesthetic qualities are important?
What level of technology and automation is required?
What ergonomic or environmental factors need to be considered?
What are the latest products and materials available?
What are the safety considerations, both in-plant and in-use?

Pallet Tools

- Interchange CN55-15, CN70-15, and CN80-15 Pallet Nailers
- Interchange SN5016 Pallet Stapler
- Hitachi NV65AH, NV75AG Pallet Nailers
- Max CN565S, CN70 Pallet Nailers
- Senco SCN56, SCN65 Pallet Nailers

Many other brands and models are available!

Pallet Fasteners

- HWCF Nails
- N Staples
- Scrail Nails

Many types and sizes available!

Collated Nails and Staples

We carry a full line of fasteners to fit most pneumatic tools! Interchange Brand products are fully guaranteed to meet manufacturer's specifications. Ask for Interchange Industrial Fasteners for your more demanding applications

GENUINE INTERCHANGE BRANDS, LLC CONSTRUCTION SUPPLIES *Interchange* **Industrial Fasteners**

Hammer Tackers

- A19 Rapid Fine Wire Hammer Tacker
- A11 Interchange and Rapid Fine Wire Hammer Tacker
- SA1116AL Interchange Pneumatic Long Magazine Stapler
- Bostitch and Duo-Fast Hammer Tackers

Tacker Staples

- A19, A11 3/8" Crown Fine Wire Staples
- STCR2619, SHCR2619, STCR5019 3/8" Crown Fine Wire Staples
- 7500 Series 7/16" Crown Chisel and Divergent Point Staples

Carton Closing Tools and Fasteners

- Refer to page 18 for carton closing tools and fasteners.

Ask your Account Manager for a copy of the Interchange Brands Catalog!

Air Compressors

Our stores stock a variety of portable and stationary air compressors from one to eight horsepower, gas or electric powered. We have the compressor to handle your industrial applications.

Air compressor maintenance and service is available.

Air Hose and Air Accessories

A complete line of air hose and air accessories are available:

- Bushing Adapters
- Circle Clamps
- Coupler Plugs
- Coupler Plug Sets
- Crosses and Tees
- Gauges
- Filters
- Hex Manifolds
- Hex Manifold Kits
- Hex Nipples
- Hoses

- Hose Accessory Kits
- Hose Reel
- Hose Repair Kits
- Lubricants
- Lubricators
- Reducer Bushings
- Regulators
- Regulator Repair Kits
- Three Way Manifold
- Three Way Manifold Kits

GENUINE INTERCHANGE BRANDS, LLC ® CONSTRUCTION SUPPLIES

Nails & Brads
Staples
Screws
Tools & Parts Kits
Compressors
Air Accessories

There are many other tools and fasteners available.

Corrugated Products

CARLSON CORRUGATED SOLUTIONS

THARCO

SURFACE GUARD A DIVISION OF Pregis

- All cartons ship and store flat to save space.
- Sizes shown are the inside dimensions of the box in the following order: length x width x depth.

Over 1,000 sizes and styles of boxes available

- Corrugated cartons
- Multi-Depth cartons
- Single, double and triple wall
- Gaylord
- Chipboard pads
- Corrugated layer pads, rolls or sheets
- Custom sizes also available

Custom solutions are available to satisfy almost any packaging need, including: Universal Laptop Packs, Universal Small Electronics Packs, Universal Computer Drive Packs, Size-Specific Laptop Packs, Handheld Electronics Packs, Optical Drive Packs, Digital Camera Packs, Motherboard Packs, Modem/ Router Packs and more!

The most commonly used shipping box is a R.S.C. (Regular Slotted Container). These boxes have flaps that meet in the center when folded. Corrugated cartons' measurements are shown as L x W x D.

The length is the longest side of the box, the width is the adjacent side and the depth (or height) is the distance between the scores that create the flaps. Measurements shown for cartons are inside dimensions.

Multi depth R.S.C. cartons are pre-scored at various lengths making it easy to adjust the size of the carton by cutting down to the desired depth.

Depth

Length   Width
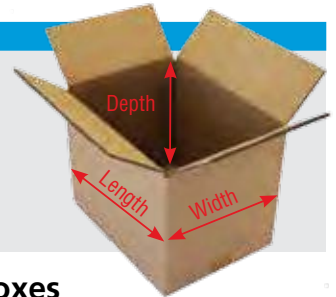
Standard 200#/ECT-32 Test RSC Single Wall Boxes

BOX SIZE LxWxD	BUNDLE COUNT	BOX SIZE LxWxD	BUNDLE COUNT	BOX SIZE LxWxD	BUNDLE COUNT
4" x 4" x 4"	25	12" x 6" x 6"	25	18" x 12" x 6"	25
6" x 4" x 4"	25	12" x 8" x 8"	25	18" x 12" x 12"	25
6" x 6" x 4"	25	12" x 9" x 6"	25	18" x 18" x 12"	25
6" x 6" x 6"	25	12" x 9" x 9"	25	18" x 18" x 18"	10
8" x 6" x 4"	25	12" x 10" x 8"	25	19" x 19" x 19"	10
8" x 6" x 6"	25	12" x 12" x 4"	25	20" x 10" x 10"	25
8" x 8" x 4"	25	12" x 12" x 6"	25	20" x 15" x 15"	20
8" x 8" x 7"	25	12" x 12" x 9"	25	20" x 20" x 20"	10
8" x 8" x 8"	25	12" x 12" x 12"	25	20" x 20" x 22"	10
9" x 9" x 9"	25	14" x 6" x 4"	25	21" x 21" x 10"	10
10" x 6" x 6"	25	14" x 10" x 10"	25	24" x 12" x 12"	25
10" x 8" x 6"	25	14" x 14" x 4"	25	24" x 18" x 18"	10
10" x 8" x 8"	25	14" x 14" x 10"	25	24" x 24" x 12"	10
10" x 10" x 4"	25	14" x 14" x 14"	25	24" x 24" x 24"	10
10" x 10" x 5"	25	15" x 12" x 10"	25	39" x 16" x 16"	10
10" x 10" x 10"	25	16" x 8" x 6"	25	12" x 12" x 12" Double Wall*	10
11-1/8" x 8-5/8" x 11"	25	16" x 10" x 10"	25		
		16" x 16" x 6"	25	*350#/ECT-51 Test RSC Double Wall Box	
		16" x 16" x 16"	25		

White Corrugated Mailers

Multi-Depth Boxes

Corrugate Roll

CONTENTS	CHOOSE
Up to 65 lbs.	200#/ECT-32
66 lbs. to 95 lbs.	275#/ECT-44
96 lbs. to 100 lbs.	275#/ECT-48 DW
101 lbs. to 120 lbs.	350#/ECT-51 DW
121 lbs. to 280 lbs.	1100#/ECT-90 TW
281 lbs. to 300 lbs.	1300#/ECT-155 TW

CORRUGATE AVAILABLE:

Single Wall: 200#/ECT-32, 275#/ECT-44,
Double Wall: 275#/ECT-48 DW, 350#/ECT-51 DW,
Triple Wall: 1100#/ECT-90 TW, 1300#/ECT-155 TW
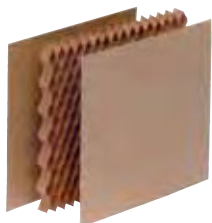
Corrugate Sheet

Chipboard Pads

Gaylord Box

Heavy Duty Corrugated Sheets

Custom Types & Sizes

Over 900 sizes and styles of boxes are available.

LK PLASTICS **POLYAIR** **Pregis**

Padded Mailers

Puncture and moisture resistant mailers keep items safe during shipping.

- Fiber padding expands as package is handled, absorbing shock and protecting contents from damage.
- Available in either open end for heat sealing or self-sealing.
- Self-sealing mailers feature adhesive strip for quick and easy sealing.
- Some items are available in kraft or white.

DESCRIPTION/SIZE	CTN CT	ITEM CODE
4" x 8"	500	000 (Open End)
5" x 10"	250	00 (Open End)
6" x 10"	250	0 (Open End or Self Seal)
7-1/4" x 12"	100	1 (Open End or Self Seal)
8-1/2" x 12"	100	2 (Open End or Self Seal)
8-1/2" x 14-1/2"	100	3 (Open End or Self Seal)
9-1/2" x 14-1/2"	100	4 (Open End or Self Seal)
10-1/2" x 16"	100	5 (Open End or Self Seal)
12-1/2" x 19"	50	6 (Open End or Self Seal)
14-1/2" x 20"	50	7 (Open End or Self Seal)

Tubes

Strong construction of the tubes protect your products from damage during shipping or storage. Available in a number of different options:

- 3-ply, spiral wound kraft - available in standard or jumbo sizes. Plastic caps are available to secure the tube ends.
- Telescoping tubes
- Crimped end tubes
- Adjustable tubes
- Some items are available in kraft, white or colored
- Square tubes
- Triangle tubes

Bubble Mailers

Bubble lined mailers provide lightweight, low cost cushioned shipping protection in a strong puncture resistant mailing bag.

- Available in either open end for heat sealing or self-sealing
- Self-sealing mailers feature adhesive strip for quick and easy sealing and are also available with a tear strip
- White or recycled golden kraft paper with a 3/16" bubble lining

DESCRIPTION/SIZE	CTN CT	ITEM CODE
4" x 8"	500	000 (Open End or Self Seal)
5" x 10"	250	00 (Open End or Self Seal)
6" x 10"	250	0 (Open End or Self Seal)
7-1/4" x 12"	100	1 (Open End or Self Seal)
8-1/2" x 12"	100	2 (Open End or Self Seal)
8-1/2" x 14-1/2"	100	3 (Open End or Self Seal)
9-1/2" x 14-1/2"	100	4 (Open End or Self Seal)
10-1/2" x 16"	100	5 (Open End or Self Seal)
12-1/2" x 19"	50	6 (Open End or Self Seal)
14-1/2" x 20"	50	7 (Open End or Self Seal)

There are more sizes and styles of the mailers available.

Co-extruded Vacuum Pouches

Made from a cost-effective film that meets FDA and USDA requirements for use with food products. The three-mil thick, seven-layer mixture of polyethylene and nylon resins provides excellent performance, and its ability to stretch allows the material to conform to unique product shapes.

- Excellent barrier properties for both oxygen and moisture vapor transmission
- Extends shelf life for a variety of food products

Laminated Foam Pouches

Lamibags are pouches made from Lamifoam, a laminated packaging material that combines foam with polyethylene film to create a strong, lightweight composite sheet. Lamibags are thinner, denser, and stronger than other foam pouches.

DESCRIPTION/SIZE		
1/16" x 8" x 6"	1/16" x 10" x 8"	1/16" x 14" x 7"
1/16" x 16" x 16"	1/16" x 24" x 14"	

Non-Laminated Foam Pouches

Foam pouches with 3" Lip are available in the same sizes as the laminated versions.

Packing List Envelopes, Poly Tubing and Poly Bags

Packing List Envelopes

Protect your shipping documents with packing list envelopes. They have a clear pressure sensitive backing that attaches securely to almost any material. The waterproof plastic envelopes are easy to close and provide tamper proof security. Eliminate the need for address labels and protect your packing lists.

We carry plain and pre-printed; colors and clear face; back, side and top loading. All pressure sensitive envelopes are made with heavy-duty 2 mil poly to protect contents from water, oil and dirt. Carton quantity on most items: 1,000.

Envelopes - Printed: Packing List Enclosed; Invoice Enclosed; Material Safety Data Sheets Enclosed; Important Documents Enclosed and more.

Common Sizes
4-1/2" x 5-1/2"	5-1/2" X 10"	7" X 5-1/2"
4-1/2" X 6"	6-3/4" X 5"	7" X 6"
		7-1/2" X 5-1/2"

> There are a number of other sizes and styles of packing list envelopes available.

Envelopes - Non-Printed: Clear face

Common Sizes
4" x 6"	6" x 6"	9" x 12"
4-1/2" x 5-1/2"	6" x 9"	9-1/2" x 12"
4-1/2" x 6"	7" x 10"	
5" x 10"	7-1/2" x 5-1/2"	
5-1/4" x 7-1/2"	8" x 10"	
5-1/2" x 10"		

> The bagging systems and portable sealing machines can be found on page 10.

Poly Tubing

Cut tubing to desired length, insert product and seal. Tubing can be heat sealed, stapled or taped at either one or both ends.

This tubing is made from 100% virgin low density polyethylene which meets LP-378 requirements. Because it is from virgin polyethylene it meets FDA requirements and can be used for food packaging and service. The tubing is wound either gusseted or flat on 3" cores.

There are a number of sizes of poly tubing available - sizes from 2 mil to 6 mil, and from 2" to 48" wide. Our most popular sizes are:

2 MIL		4 MIL	
	14" x 2700'		14" x 1350'
2" x 1500'	16" x 2700'	2" x 750'	16" x 1350'
4" x 3000'	18" x 2400'	4" x 1500'	18" x 1200'
6" x 3000'	24" x 1800'	6" x 1500'	24" x 900'
8" x 3000'	30" x 1500'	8" x 1500'	30" x 750'
10" x 3000'	36" x 1350'	10" x 1500'	36" x 675'
12" x 3000'	48" x 900'	12" x 1500'	48" x 450'

Centerfold Poly Bags

Centerfold poly bags are essentially film on a roll, folded in the middle so that the roll is easier to handle. The film has a slit on the side of the crease.

1 MIL	2 MIL	3.5 MIL
54" x 40"	54" x 118"	118" x 55"
		140" x 55"

Poly Bags on a Roll

Bags on a roll are pre-opened at one end for easy insertion and pre-sealed at the other end. Perforated for easy tear off with over 40 sizes available - from 1 mil to 4 mil and from 2" x 3" to 12" x 15".

Cohesive (Cold Seal) Packaging

Cohesive single face is an ideal packaging material where cushioning and rigidity are required. Capabilities include:

- 50#, 70#, 100# standard paper grades
- Bleached, colored, specialty papers available
- B Flute & E Flute
- Widths from 3" to 65"
- Roll length from 250' to 1000'
- Tear strip or perforation available
- 1 or 2 color printing is available

Types of Tubing/Sheeting
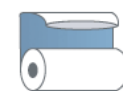
TUBING | CENTER FOLD SHEETING | J SHEETING
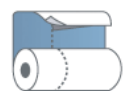
SINGLE WOUND SHEETING | DOUBLE WOUND SHEETING | GUSSET TUBING

Poly Bags

Polyethylene bags are designed to handle a variety of packaging needs: they can hold everything from small parts to all types of food items and can be heat sealed to provide security or retain freshness.

- Bags are from seamless tubing and bottom sealed for extra strength; no side or slit seals.
- Dimensions represent the interior usable portion of the bag.

Also available with these options:

- Flat or gusseted
- Individually cut or on a roll
- Bags with white block
- Reclosable: single or double track slide seal
- With hang holes
- A variety of mil thicknesses
- Static shield and anti-static

Refer to page 10 for the bagging and sealing systems.

Layflat Bags

There are a number of sizes of flat bags available, sizes from 1 mil to 6 mil and 2" x 3" to 56" x 60". Close bags with twist ties, bag tape or by heat sealing. Listed are some of our most popular layflat bag sizes:

1 MIL (WxH)	10" x 12"	**3 MIL (WxH)**	8" x 10"
12" x 18"	10" x 14"	4" x 6"	9" x 12"
1.5 MIL (WxH)	12" x 15"	6" x 8"	10" x 12"
4" x 6"	12" x 16"	5" x 15"	12" x 15"
2 MIL (WxH)	12" x 18"	5" x 25"	12" x 18"
4" x 6"	14" x 20"	24" x 30"	18" x 24"
4" x 8"	18" x 24"	24" x 36"	24" x 30"
6" x 8"	20" x 24"	**4 MIL (WxH)**	24" x 36"
8" x 10"	24" x 24"	4" x 6"	**6 MIL (WxH)**
8" x 12"	24" x 30"	5" x 8"	6" x 8"
9" x 12"	24" x 36"	6" x 8"	9" x 12"

Bag Tapers

Standard: Easy to use. Twist mouth of bag shut and move through slot. 3/8" wide throat.

Heavy duty: 5/8" wide throat seals heavy mil bags. Built in trimmer. All steel taper with sturdy base. Uses 3/8" and 5/8" wide tape.

There are many other sizes of poly bags and tubing available.

Gusseted Bags

Gusseted sides provide extra room for irregularly shaped items. There are over 150 sizes of gusseted bags from 1 mil to 3 mil and from 3" x 2" x 8" to 36" x 36" x 70" in size. Our most popular sizes are:

1 MIL (WxDxH)	5" x 3" x 12"	16" x 14" x 36"	12" x 8" x 30"
8" x 4" x 18"	6" x 4" x 15"	24" x 20" x 48"	**4 MIL (WxDxH)**
1.5 MIL (WxDxH)	6" x 4" x 20"	30" x 26" x 60"	8" x 4" x 18"
16" x 14" x 24"	8" x 4" x 12"	**3 MIL (WxDxH)**	12" x 8" x 30"
24" x 20" x 48"	8" x 4" x 18"	5" x 3" x 15"	
2 MIL (WxDxH)	10" x 8" x 24"	8" x 4" x 18"	
3" x 2" x 8"	12" x 8" x 30"	10" x 8" x 24"	

Reclosable Bags

There are a number of sizes of reclosable bags available. Sizes from 2 mil to 8 mil, from 1" x 1" to 30" x 30", with a single track zipper that securely closes the top of the bag to keep products inside clean and moisture free. Meets FDA requirements for food applications. Listed are some of our most popular reclosable bag sizes:

2 MIL (WxH)	12" x 15"	10" x 12"
2" x 3"	12" x 18"	10" x 13"
3" x 4"	13" x 15"	12" x 12"
3" x 5"	13" x 18"	12" x 15"
4" x 4"	16" x 20"	13" x 18"
4" x 6"	18" x 24"	14" x 24"
5" x 7"	24" x 36"	24" x 24"
5" x 8"	**4 MIL (WxH)**	**6 MIL (WxH)**
6" x 6"	2" x 3"	2" x 3"
6" x 8"	3" x 4"	3" x 4"
6" x 9"	3" x 5"	3" x 5"
8" x 8"	4" x 6"	4" x 6"
8" x 10"	5" x 8"	6" x 9"
9" x 12"	6" x 8"	8" x 10"
10" x 12"	6" x 9"	9" x 12"
10" x 13"	8" x 10"	
12" x 12"	9" x 12"	

QTY: 100 PCS, COLOR: GRN.

Reclosable Bags

Mil	Application
1 Mil	Economical, lightweight, temporary storage for lighter items.
2 Mil	Most popular thickness used for general light to medium weight products like clothing, small parts or food.
3 Mil	Sturdy mil protects medium to heavier products.
4 Mil	Heavy duty mil protects heavy products such as hardware and tools.
6 Mil	Extra heavy duty for puncture resistance. Protects heavyweight products such as industrial parts, machinery and metal tools.

Corrosion Protection
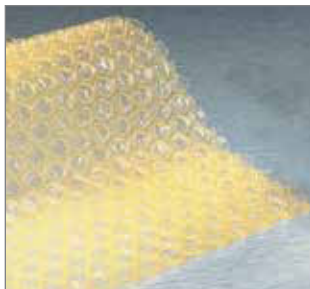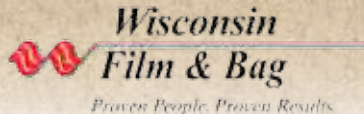
VCI Corrosion/Rust Inhibiting Products: Bubble, Sheeting, Paper, Film and Bags

Protective Bubble Cushioning

Bubble cushioning offers active corrosion protection as well as physical protection. Provides superior strength, extraordinary air retention, and powerful corrosion protection for short or long-term shipping and storage applications.

- Vapor molecules protect enclosed product from rust and corrosion for up to 5 years.
- Corrosion inhibiting products are environmentally friendly, non-toxic, odorless, and non-allergenic.
- Have been cleared by the FDA for protecting metals used in food processing and packaging.
- Has no coating of chemicals that flake off, stick to, or otherwise damage the product they are designed to protect.

There are many sizes of protective bags and bubble cushioning available.

Corrosion Inhibiting Protective Bags

Zerust packaging materials contain proprietary chemical formulations that release an invisible, odorless, and non-toxic corrosion inhibiting vapor into the air inside the bag. Simply place metal parts into Zerust packaging and seal it. Within two or three hours the interior of the package will be saturated with Zerust vapor molecules and a powerful corrosion inhibiting molecular layer will form on all exposed metal surfaces. Later, when the parts are removed from the packaging, the Zerust corrosion inhibiting molecular layer will immediately vaporize into the atmosphere. This leaves behind clean, dry and corrosion free parts that are ready for immediate use and require no further cleaning or handling.

SIZE	CTN CT	ITEM CODE
3.2 mil, 4" x 6"	2000	325-F-00021
3.2 mil, 5" x 8"	2000	325-F-00020
3.2 mil, 6" x 10"	1000	325-F-00019
3.2 mil, 8" x 12"	1000	325-F-00018
3.2 mil, 10" x 12"	1000	325-F-00017
3.2 mil, 67" x 26" x 65"	50	325-F-00013
6 mil, 5" x 24"	250	025-F-00259

VCI Corrosion Control Paper Products

Prevents metal from rusting - protects multi-metals from corrosion and rust.

Industrial Rolls
- Chemically treated paper continuously vaporizes creating an environment that blocks out rust, corrosion and oxidation.
- One square foot of VCI Paper for every one cubic foot of packaging area is recommended.
- Completely wrap for maximum protection.
- Heavy duty rolls are available for long-term storage of iron, steel and other ferrous metals.
- Use VCI waxed paper rolls to prevent moisture, oil or grease from seeping beyond the paper.

Paper Sheets
- VCI Sheets are chemically treated paper that shield ferrous metals from rust, corrosion and oxidation.
- Use for domestic or international shipments.

Call for quotes on VCI and anti-static bags or for sizes not shown.

VCI Poly Bags

Low density 4 mil VCI polyethylene film bags with a corrosion inhibitor offer corrosion preventative packaging and also provide a dust and moisture barrier. The transparent bags allow products to be identified, inventoried and picked without the need to open up the package.

VCI Flat Poly Bags
- No wrapping necessary - simply place the product directly into the bag.

4" x 6"	8" x 10"	12" x 18"	24" x 36"
6" x 8"	9" x 12"	18" x 24"	

VCI Reclosable Poly Bags
- Single track zipper securely closes the top of the bag to keep products inside clean and moisture free.

3" x 5"	6" x 8"	9" x 12"
4" x 6"	8" x 10"	12" x 18"

VCI Gusseted Poly Bags
- Large bags feature expandable sides and a fitted bottom to protect bigger items.
- Perforated on a roll for easy dispensing.

40" x 36" x 80"   54" x 44" x 96"

Ask about corrosion protection for short or long-term shipping and storage applications.

3M   **POLYAIR**   **LaDDaWn**
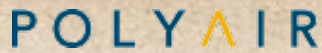
Static Control Products: Poly Tubing, Film, Bags, Foam and Bubble

Anti-Static Poly Tubing: Make your own custom size bags by cutting the tubing to your desired length, inserting the product and heat sealing both ends.
- Available in 2 mil (2,150' roll) and 4 mil (1,075' roll), widths from 3" to 24".

Anti-Static Hand Stretch Film: Keep shipments clean while protecting from static discharge. Pink cast film stretches up to 250%.
- 80 gauge 17" x 1,500' roll.

Anti-Static Poly Bags: Pink anti-static (PAS) bags and black conductive bags are made with an extra-strong bottom seal or a durable side weld. Protect electronic components from static build-up, dust, dirt and moisture.
- Anti-Static Flat Bags are available in 2 mil, 4 mil and 6 mil, sizes from 2" x 3" to 36" x 36".
- Anti-Static Reclosable Bags are available in 4 mil, sizes from 2-1/2" x 3" to 12" x 12".

Anti-Static Air Foam: Lightweight, pink, anti-static foam is non-abrasive, moisture-resistant and keeps products clean.
- Air Foam Rolls are available in 1/8" (550' roll) and 1/4" (250' roll) foam thicknesses, 6", 12", 18", 24" and 72" widths.
- Perforated Air Foam Rolls are cross perforated every 12" for easy tear off. Available in 1/8" (550' roll) and 1/4" (250' roll) foam thicknesses, 6", 12", 18", 24" and 72" widths.
- Air Foam Dispenser Packs are cross perforated every 12" for easy tear off. Foam is 1/8" thick and available in either 12" x 175' or 24" x 175'.
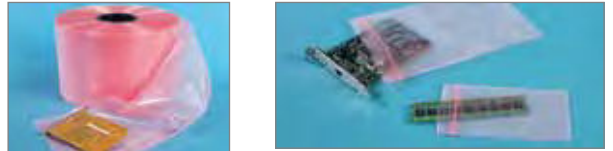
Anti-Static Bubble: Pink bubble safeguards against shock, abrasion and vibration. Available in 3/16" (750' roll), 5/16" (375' roll) and 1/2" (250' roll) bubble heights, in 12", 24" and 48" widths.
- Air Bubble Rolls
- Perforated Air Bubble Rolls are perforated every 12".
- Air Bubble Dispenser Packs are cross perforated every 12" for easy tear off.
- Bubble Pouches are self seal: simply insert product, peel tape and seal! Available in 3/16" bubble height in sizes from 4" x 5-1/2" to 18" x 23-1/2".

3M™ Static Shielding Bags

These transparent, metallized static shield bags provide a static safe environment for sensitive electronic devices.
- Faraday Cage effect shields and protects from ESD and electrostatic fields.
- Printed with ESD warning symbol and the bags are date-coded for quality control traceability.
- Strong 3.1 mil construction available in sizes from 2" x 3" to 30" x 24".
- Available in open end and reclosable styles.
- Quickly secure static sensitive items with the reusable, double track reclosable bags.
- Meets EIA 625, MIL-HDBK-263, MIL-STD-1686 and EOS/ESD standards.
- Four-layer construction offers excellent protection from punctures and tears.
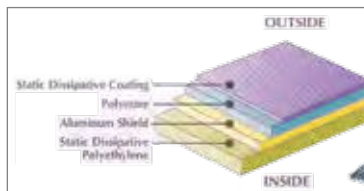
3M™ Dri-Shield Moisture Barrier Bags

Protect expensive electronic components from damage due to moisture or electrostatic discharge.
- Suitable for vacuum packaging and nitrogen flushing.
- Meets electrical and physical requirements of EIA 583, EIA 541, EIA 625.
- Static safe dissipative inner and outer surfaces.
- Maximum puncture resistance.
- 3.6 mil, sizes from 3" x 5" to 18" x 24".

POLYAIR   **Pregis**   **Litin**

Bubble

The flexibility and strong burst strength of bubble provides superior wrapping, cushioning, void fill and surface protection, and it performs under pressure. Available in 3/16" (750' roll), 5/16" (375' roll) and 1/2" (250' roll) bubble heights in both standard and heavy duty.

Air Bubble Rolls:

- Standard and heavy duty rolls in 12", 24" and 48" widths.
- Perforated rolls are perforated every 12".
- UPS shippable size rolls are also available.
- Adhesive air bubble rolls - adhesive sticks directly to your product; 3/16" bubble is cross-perforated every 12" for easy tear off. 300' rolls are available in 6", 12" or 24" widths.
- Cohesive air bubble rolls - no tape needed as cohesive air bubble only sticks to itself - not to your products. 3/16" bubble is cross-perforated every 12" for easy tear off. 300' rolls are available in 12" or 24" widths.

Air Bubble Pouches:

- Bubble Pouches are self seal: insert product, peel tape and seal! Bubble is on the outside, smooth on the insides making it easier to insert the product. Available in bubble height 3/16" or 5/16"; sizes from 3" x 3-1/2" to 18" x 23-1/2".
- Flush cut pouches have an open end; available in sizes from 3" x 5" to 36" x 48".

Dispenser Packs:

- Air bubble dispenser packs are cross perforated every 12" for easy tear off.
- Adhesive air bubble dispenser pack have 3/16" bubble that is cross-perforated every 12" for easy tear off. Available in 12" x 175' size.
- Cohesive air bubble dispenser packs have 3/16" bubble that is cross-perforated every 12" for easy tear off. Available in 12" x 175' pack.

Insulated box liners, bubble mailers and bubble rolls are also available.

Actual Bubble Height
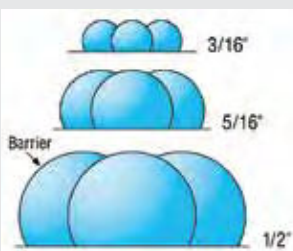
- Small bubble offers better protection for small and fragile items.
- Large bubble is better used for void fill and protection of larger, less fragile items.
- Bubble sizes are measured by the bubble height - the width is larger than this measurement.

Boxed Bubble

Box-A-Bubble is an octagonal shaped carton containing a 4' wide roll of bubble. This convenient dispenser is ideal for use in mail order operations, catalog houses and offices.

- 1/2" bubble is perforated every 12" for easy-to-use tear-off sheets.
- Roll is 48" wide x 80'.
- Superior burst strength so the bubble withstands pressure and abuse, giving maximum product protection.
- Large roll of bubble in an octagonal box serves as a dispenser on a warehouse table, saving space and increasing convenience.
- Box is designed to be UPS shippable.

DESCRIPTION/SIZE	ITEM CODE
Box-A-Bubble, 1/2" x 48" x 80'	BB-L

Many other sizes and styles are available!

Green Recycled Bubble

Designed to incorporate high levels of post consumer recycled content without losing product integrity. The green color promotes purchase and awareness of recycled content products, and Green Bubble is in turn recyclable, keeping the chain in motion.

- Recycled bubble contains up to 40% recycled - using up to 20% post-consumer content reducing landfill waste.
- Manufactured using reusable polyethylene resin.
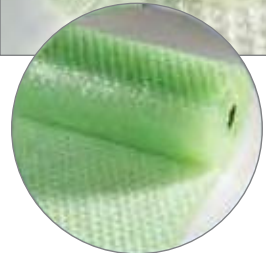
Peanuts

Peanuts easily fill in and around the contents of a shipping box, providing a cushion of protection on all sides. Made of moisture-proof material, peanuts are a lightweight packing alternative that saves on shipping costs, yet is durable enough to be reused.

Available in 7, 14 or 20 cubic foot bags. The 7 cu. ft. bags are UPS shippable.

Pink anti-static, biodegradable, and recycled packing peanuts are also available.

POLYAIR · Pregis · AirPouch
A PRODUCT OF AUTOMATED PACKAGING SYSTEMS · Litin

Foam Padding

Non-abrasive, light-weight air foam is filled with thousands of cushioning air cells to protect your product.

Air Foam Rolls

- Foam thicknesses: 1/32" (2,000' roll), 1/16" (1,250' roll), 3/32" (750' roll), 1/8" (550' roll) and 1/4" (250' roll).
- 6", 12", 18", 24", 48" and 72" widths.
- Shock absorbing foam provides cushioning and surface protection.
- Moisture resistant.
- Air foam rolls can be custom slit and/or perforated to your exact specifications.
- Recycled and UPSable rolls are also available.

Perforated Air Foam Rolls

Foam rolls are cross-perforated every 12" for easy tear off.
- Foam thicknesses: 1/32" (2,000' roll), 1/16" (1,250' roll), 3/32" (750' roll), 1/8" (550' roll) and 1/4" (250' roll).
- 6", 12", 18", 24", 48" and 72" widths.
- Light-weight protection.
- Foam absorbs shocks.
- Keeps products clean and mark free.
- Non-abrasive.
- Moisture resistant.
- UPSable rolls are available.

Air Foam Dispenser Packs

Air Foam cushioning in a convenient dispenser pack!
- Foam thicknesses: 1/16" (350' roll), 1/8" (175' roll) and 1/4" (85' roll).
- 12" and 24" widths.
- Portable dispenser pack is great for workstation use.
- Light-weight foam keeps product protected and clean.
- Moisture resistant.
- Cross-perforated at 12" for easy tear off.

Air Foam Sheets

Pre-cut polyethylene foam sheets save packing time.
- Light-weight 1/8" foam protection.
- 4" x 4", 6" x 6", 8" x 8", 10" x 10", 12" x 12" and 24" x 24" sizes.
- Non-abrasive foam will not scratch or mark.
- Moisture resistant.
- Use to wrap small items and as a cushioning layer pad.

Cohesive Air Foam Rolls

Make your own custom foam pouches.
- 1/16" thick foam is cross-perforated every 6" for easy tear off.
- 12" x 625' and 24" x 625' rolls.
- Will not leave a residue behind because it sticks to itself, not to the product.
- Put the product on the foam, fold and press sides for a custom fit.

Flush Cut Foam Pouches

- 1/8" thick polyethylene foam pouches are available in a number of sizes from 2-3/4" x 3" to 36" x 36".
- Non-abrasive, polyethylene air foam cut and sealed forms a convenient light-weight bag.

Kraft Paper

Kraft paper can be used as void fill around a product and is also excellent for wrapping delicate products prior to packaging. Available in rolls or sheets.

Kraft Paper Rolls

- Available in 30# (1,200' roll), 40# (900' roll), 50# (720' roll), 60# (600' roll), or 75# (475' roll).
- Roll sizes range from 12" to 60" wide.

Kraft Paper Sheets

- Available in 30#, 40# or 50# precut sheets.
- Roll sizes: 18" x 18", 18" x 24", 24" x 36", 30" x 40" or 36" x 48" (50 lbs./bundle)

Recycled Kraft Paper

Recycled Kraft paper is a perfect economical void fill/dunnage/packing paper. Absorbent and bulky, conformable yet durable. Each pallet of 24" turns into 1000 cubic feet of void fill.
- 100% recycled fiber
- All widths (2" to 72") and basis weights (30# to 70#)

Poly Coated Kraft Paper

Perfect for wrapping and protecting metal parts, good vapor barrier and protects products from water, oil, dust and grease damage.
- 10# gloss poly coating on one side; 40# virgin kraft paper on the other
- 600' Rolls available in 12", 18", 24", 36", 48" and 60" widths
- 18" x 24" or 24" x 36" sheets

Waxed Paper

Protects products from oil, grease and moisture. Lightweight, 30#, 100% virgin kraft paper is waxed on both sides to provide non-abrasive protection.
- 1,500' Rolls available in 12", 18", 24", 36", 48" and 60" widths
- 12" x 12" or 24" x 36" sheets

Anti-Slip/Anti-Skid Paper

Great for stabilizing loads on pallets or preventing items from sliding during transport.
- 80# kraft is available in 37" x 45" or 40" x 48" (to fit 48" x 40" pallet)
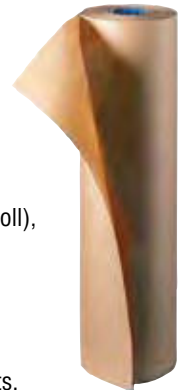
Masking Tape

Masking tape can be used for paint masking, holding light-duty work, splicing, bundling or packaging. Medium utility grade is used in professional painting applications, and is also good for brush, roller and spray paint applications. Premium grade is generally used when conformity and tensile strength are important.

DESCRIPTION/SIZE	CTN CT
Economy Grade - Natural, 4 mil	
3/4" x 60 yd. (18mm x 55m)	48
1" x 60 yd. (24mm x 55m)	36
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16
Industrial Grade - Natural, 5 mil	
3/4" x 60 yd. (18mm x 55m)	48
1" x 60 yd. (24mm x 55m)	36
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16
Premium Grade - Natural, 6 mil	
3/4" x 60 yd. (18mm x 55m)	48
1" x 60 yd. (24mm x 55m)	36
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16

UV Resistant Masking Tape

Removes cleanly days after application, even when exposed to direct sunlight and high humidity.

UV Resistant 14-Day Masking Tape - Blue

DESCRIPTION/SIZE	CTN CT
3/4" x 60 yd. (18mm x 55m)	48
1" x 60 yd. (24mm x 55m)	36
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24

Flatback Tape

Pressure sensitive paper tape is stronger than masking tape, yet tears with ease. Seals securely under a wide range of temperature and humidity conditions. Colors are available.

DESCRIPTION/SIZE	CTN CT
Economy Grade - Kraft or Natural, 4-5 mil	
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16
Industrial Grade - Kraft or Natural, 5-6 mil	
1" x 60 yd. (24mm x 55m)	36
1-1/2" x 60 yd. (36mm x 55m)	24
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16
Premium Grade - Kraft or Natural, 6-7 mil	
1" x 60 yd. (24mm x 55m)	36
2" x 60 yd. (48mm x 55m)	24
3" x 60 yd. (72mm x 55m)	16

Double-Sided Film Tape

Features adhesive on both sides of tape.

Medium utility grade has a heavy duty, double coated, flatback with a natural rubber adhesive.

Premium grade is a double-coated, vinyl (PVC) film with an aggressive natural rubber adhesive with great initial tack. All sizes are available in paper or vinyl back.

DESCRIPTION	CTN CT
General Purpose Grade, 3.2 mil	
3/4" x 36 yd. (18mm x 33m)	48
1" x 36 yd. (24mm x 33m)	36
2" x 36 yd. (48mm x 33m)	24
Specialty Grade, 3.7 mil	
3/4" x 36 yd. (18mm x 33m)	48
1" x 36 yd. (24mm x 33m)	36
2" x 36 yd. (48mm x 33m)	24

Double-Sided Foam Tape

Acrylic adhesive seals, cushions vibrations, resists impacts and insulates. Acrylic adhesive features high bond strength and high temperature and solvent resistance.

- Available in thicknesses:
  1/32" **Economy Grade** (72 yd)
  1/16" **Industrial Grade** (36 yd)
  1/8" **Premium Grade** (36 yd)

DESCRIPTION	CTN CT
1/2" width	24
3/4" width	16
1" width	12
2" width	24

Also available in pre-cut strips!

Double-Coated Tape

An extremely aggressive tack which is ideal for many industrial uses.

Industrial Grade - Natural, 5 mil
Double-coated crepe paper tape with white liner.

DESCRIPTION/SIZE	CTN CT
3/4" x 36 yd. (18mm x 32.9m)	48
1" x 36 yd. (24mm x 32.9m)	36
2" x 36 yd. (48mm x 32.9m)	24

Premium Grade - Natural, 6.5 mil
Double-coated flatback.

DESCRIPTION/SIZE	CTN CT
3/4" x 36 yd. (18mm x 32.9m)	48
1" x 36 yd. (24mm x 32.9m)	36
1-1/2" x 36 yd. (36mm x 32.9m)	24
2" x 36 yd. (48mm x 32.9m)	24
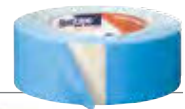
Label Protection Tape

To keep your shipping information clean, legible and attractive, use the tough, clear and abrasion-resistant label protection tape. Attach labels and documents securely to paper, wood, metal and plastic.

DESCRIPTION/SIZE	CTN CT
Economy Grade, 1.5 mil	
4" x 145 yd.	12
5" x 145 yd.	8
6" x 145 yd.	8
Industrial Grade, 1.9 mil	
4" x 110 yd.	18
5" x 110 yd.	12
Premium Grade, 2.5 mil	
4" x 72 yd.	8
5" x 72 yd.	8
6" x 72 yd.	8

Many other sizes and grades of tape are available.

Local Stock

Our locations normally stock the common consumables used by the machines we sell. In the case of unusual requirements, we will be pleased to stock those consumables you use and agree to purchase.

Filament Strapping Tape

Fiberglass reinforced filament tapes deliver superior adhesion for a variety of applications. Due to its fibers and polyester backing, PET tape does not stretch and is thus the ideal choice for carton sealing.

DESCRIPTION/SIZE	CTN CT
Economy Grade, 4.5-5.2 mil	
3/8" x 60 yd., PET (9mm x 55m)	96
1/2" x 60 yd., PET (12mm x 55m)	72
3/4" x 60 yd., PET (18mm x 55m)	48
1" x 60 yd., PET (24mm x 55m)	36
2" x 60 yd., PET (48mm x 55m)	24
Premium Grade, 6.3-6.7 mil	
1/2" x 60 yd., PET (12mm x 55m)	72
3/4" x 60 yd., PET (18mm x 55m)	48
1" x 60 yd., PET (24mm x 55m)	36
2" x 60 yd., PET (48mm x 55m)	24

Most of our filament tapes are available in either white or natural colors; many other sizes and grades are also available!

Cloth Duct Tape

We offer utility grade to extra heavy duty grade cloth ducts tapes, all of our cloth tapes are made with high grade raw materials and are held to the highest quality standards.

There are a number of different grades, sizes and colors of duct tape available.

DESCRIPTION/SIZE	CTN CT
2" x 60 yd. Silver	24
3" x 60 yd. Silver	24

Water Activated Gummed Tape

Available in a wide variety of sizes and product construction, reinforced water activated gummed tapes are designed to provide consistent performance in carton sealing applications where durability, extra strength and reliability are required. Extra strong fiberglass yarns are bonded between the high tensile strength sheets for an extra margin of strength. Water activated gummed tapes are available non-reinforced, too, and both types bond instantly to corrugated cartons and paper, and the immediate destructive bond results in a tamper evident package.

DESCRIPTION/SIZE	CTN CT
Non-reinforced Medium Duty – Natural/White	
Natural 2-1/2" x 600', with core (60mm x 183m)	12
Natural 3" x 600', with core (72mm x 183m)	10
Reinforced – Natural/White	
Natural 70mm x 375', coreless (115m)	8
Natural 70mm x 450', coreless (138m)	10
Natural 70mm x 600', coreless (183m)	10
White 72mm x 450', with core (138m)	10
Natural 72mm x 450', with core (138m)	10
Natural 3" x 450', heavy duty	10

Tensilized Strapping Tape

Tensilized strapping tape, unlike filament tape, does not have reinforcing filaments in them. This allows them to stretch, and makes them a good choice for bundling or unitizing. BOPP - Biaxially Oriented Poly Propylene - tape backed filament tape is available in black, white or natural.

DESCRIPTION/SIZE	CTN CT
Medium Grade Utility	
1/2" x 60 yd., BOPP (12mm x 55m)	72
3/4" x 60 yd., BOPP (18mm x 55m)	48
1" x 60 yd., BOPP (24mm x 55m)	36
2" x 60 yd., BOPP (48mm x 55m)	24

Sheathing Tape

Sheathing tape provides superior sealing, protective benefits and ease of handling. Use for permanent seaming and sealing of joints in foam insulation and other sheathing materials, to secure lap edges in house wraps and other vapor barriers, repair rips and tears in roll and batt insulation, construction films, and membranes. Eliminates drafts around window and door openings. Resistant to mold growth and high humidity.

We have the perfect tape for your application.

Carton Sealing Tapes

ipg intertape polymer group™

Shurtape®

STA PACKAGING TAPES

Ga TAPES & ADHESIVES

Many other sizes available from 1.6 mil to 3 mil; 2", 2-1/2" and 3".

Many other sizes available from 1.6 mil to 3 mil; 2", 2-1/2" and 3".

Hot Melt Tape - Clear

Hot melt adhesive carton sealing tapes have superior adhesion properties and the widest range of applications available from tape.

General purpose grade is recommended for light duty packaging applications. Production grade is reliable in both manual or automated carton sealing applications, and is recommended for closure of medium weight cartons in normal manufacturing and shipping environments, holding and repair applications. Performance grade products are designed for demanding aerospace, automotive and industrial applications.

DESCRIPTION/SIZE	GRADE	MIL	CTN CT
2" x 55 yd. (48mm x 50m)	Production	1.9 mil	36
2" x 110 yd. (48mm x 110m)	General Purpose	1.6 mil	36
2" x 110 yd. (48mm x 110m)	Production	1.85 mil	36
2" x 110 yd. (48mm x 110m)	Production	1.9 mil	36
2" x 110 yd. (48mm x 110m)	Performance	2.2 mil	36
2" x 110 yd. (48mm x 110m)	Performance	2.5 mil	36
2" x 1000 yd. (48mm x 914m)	General Purpose	1.6 mil	6
2" x 1000 yd. (48mm x 914m)	Production	1.85 mil	6
2" x 1000 yd. (48mm x 914m)	Production	1.9 mil	6
2" x 1500 yd. (48mm x 1371m)	Production	1.85 mil	6
2" x 1500 yd. (48mm x 1371m)	Production	1.9 mil	6
3" x 110 yd. (72mm x 110m)	General Purpose	1.6 mil	24
3" x 110 yd. (72mm x 110m)	Production	1.85 mil	24
3" x 110 yd. (72mm x 110m)	Production	1.9 mil	24
3" x 110 yd. (72mm x 110m)	Performance	2.2 mil	24
3" x 1000 yd. (76.2mm x 914.4m)	General Purpose	1.6 mil	4
3" x 1000 yd. (76.2mm x 914.4m)	Production	1.9 mil	4

Emulsion Acrylic Carton Sealing Tape

For packaging subjected to normal shipping hazards, where a high level of sealing performance and clarity is required. Strong adhesive grips well to corrugated cartons. ***User friendly - sticks to the box, not to itself!***

DESCRIPTION/SIZE	MIL	CTN CT
2" x 55 yd., Clear (48mm x 50m)	2 mil	36
2" x 110 yd., Clear (48mm x 110m)	1.6 mil	36
2" x 110 yd., Clear (48mm x 110m)	1.8 mil	36
2" x 110 yd., Clear (48mm x 110m)	2 mil	36
2" x 110 yd., Tan (48mm x 110m)	2 mil	36
2" x 1000 yd., Clear (48mm x 914m)	2 mil	6
3" x 110 yd., Clear (72mm x 110m)	2 mil	24
3" x 1000 yd., Clear (72mm x 914m)	2 mil	4

There are many other sizes and types of tapes available.

Packaging Tape Guide: Hot Melt vs. Acrylic

Hot Melt — The most common adhesive in the U.S., hot melt provides excellent quick-grab and adhesion. It is economical and preferred for most light-duty situations. It is especially well suited for use with automated equipment.

Acrylic — Acrylic tapes exhibit good ultraviolet and exterior durability, excellent chemical resistance and a broad range of service temperatures.

Colored and Printed Hot Melt Tape is also available.
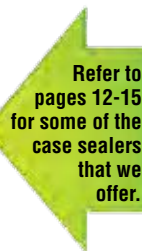
Special order printed tape is also available. Consult your Account Manager for ordering information.

We carry a wide variety of quality tapes for a number of different applications.

Filament Strapping Tape Dispenser

Use this tape dispenser with either 1" or 2" strapping tape with a 3" core to reinforce boxes, bags or almost anything else. The lightweight, handheld dispenser features a hand brake that allows tension to be applied while reinforcing the package.

Hand Tape Dispensers

For pressure sensitive carton sealing tapes, our selection of hand tape dispensers includes models with a pistol grip and also models with a brake. All of them feature the same heavy duty construction.

DESCRIPTION
2" Hand Tape Dispenser with Brake
2" Heavy Duty Hand Tape Dispenser
3" Heavy Duty Hand Tape Dispenser with Brake
3" Hand Tape Dispenser with Adjustable Brake

Hand Label Protection Tape Dispensers

For label protection tapes, our selection of dispensers includes both hand and table top models. All feature the same heavy duty construction.

DESCRIPTION
4" Label Protection Tape Dispenser, Hand
4" Label Protection Tape Dispenser, Bench/ Table Top

Many other Packaging, Building, Construction and Specialty Tapes are available.

Let us help you find the right tape for your sealing requirements.

Spray Products

Spray Adhesives

Spray adhesives are used for temporary and permanent bonds when quick bond times are essential.

Camie

300 General Purpose Spray Adhesive: essentially colorless, instant tack, high strength, temporary and permanent bonds

363 High Strength Fast Tack Spray Adhesive: transparent, web spray pattern, low soak-in

373 High Performance Adhesive: colorless, mist spray, all purpose, pressure-sensitive, highly effective, low soak-in

3M

Repositionable 75 Spray Adhesive is an adhesive that provides tape-like bonds on many lightweight materials. It adheres in seconds, yet has an extra-long tack range that allows you to lift and reposition materials.

Rubber And Vinyl 80 Spray Adhesive is a high performance neoprene based contact aerosol spray adhesive.

Scotch-Weld™ Foam Fast 74 Inverted Spray Adhesive is an is an industrial grade spray adhesive for foam bonding, featuring upside down spray technology.

Super 77™ Multi-Purpose Spray Adhesive is a high tack, high coverage and fast drying adhesive.

Hi-Tack 76 Spray Adhesive is an industrial aerosol spray adhesive with high tack for one surface bonding applications.

Hi-Strength 90 Spray Adhesive is an industrial high strength contact adhesive for furniture, woodworking, marine, acoustics, and construction applications such as tilt-up and precast

Aervoe

Industrial Adhesive 8177: provides holding power on most surfaces, rough or smooth.

Hi-Strength Adhesive 8190: A high-strength, industrial grade adhesive for extra-strong bonding of materials to a variety of surfaces.

Spray Products

Camie

20/25 Stainless Steel Cleaner & Polish: quickly cleans and polishes stainless steel in one easy application without streaking.

22/80 Citrus Cleaner: removes adhesives, grease, oil stains, road tar, rubber marks, decal residue, etc., and leaves no residue

22/90 Heavy Duty Degreaser: for heavy duty degreasing in the manufacturing process

999 Dry Silicone: 4% dry, all purpose, eliminates squeaking and sticking on most applications; use for rigid polyurethanes, epoxies, polyesters, TPR and other thermosetting resins

A1000 Dry Lubricant Release Agent: fine, dry film, produces slick, friction-free surface between like and unlike substrates

ITEM	DESCRIPTION	NET WEIGHT
20/25	Stainless Steel Cleaner & Polish	18 oz.
22/80	Citrus Cleaner	15 oz.
22/90	Heavy Duty Cleaner Degreaser	15 oz.
999	Dry Silicone Lubricant	13 oz.
A1000	Dry Lubricant Release Agent	13 oz.

Spray Products

- Adhesive Remover - Citrus Based
- Repositionable Adhesive
- Polystyrene Foam Insulation Adhesive
- Rubber and Vinyl Adhesive
- Pressure Sensitive Adhesive
- Foam to Wood, Metal or Plastic Adhesive
- Labeling Adhesive
- Case Sealing Adhesive
- Palletizing Adhesive
- Light-weight Adhesive
- High Tack Adhesive
- High Strength Adhesive

and more!

A wide variety of spray adhesives, cleaners, degreasers and lubricants are available.

A wide variety of spray adhesives, cleaners, degreasers and lubricants are available.

diagraph MSP   MSSC   PILOT   Sharpie
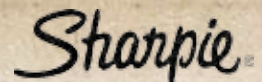
Paint Markers

Now available in 13 weather-and fade-resistant colors and with replaceable tips. Makes permanent marks on: porous and non-porous surfaces, metal, wood, corrugated, rubber, plastic, and glass.

Available in a wide variety of colors.

Refillable Jumbo Chisel Point Marking Pens with Permanent Ink
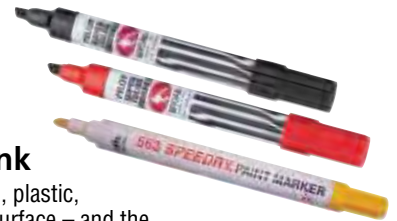
Marks permanently on wood, plastic, metal, glass – virtually any surface – and the durable chisel point tip marks wide or fine lines. This is the industrial marker of choice! Also features refillable, fast drying, waterproof ink. Available in black, blue, red and green.

DESCRIPTION	COLOR
Jumbo Chisel Point Marker	Black
Refill Ink for Jumbo Marker	Black
Jumbo Chisel Point Marker	Red
Refill Ink for Jumbo Marker	Red
Jumbo Chisel Point Marker	Blue
Refill Ink for Jumbo Marker	Blue
Jumbo Chisel Point Marker	Green
Refill Ink for Jumbo Marker	Green

Also available in Broad Chisel Point and Fine Bullet Point.

Blockout Spray

Reuse your storage cartons by covering up unwanted marks with our blockout inks. Dries quickly and is oil- and water-resistant on porous and non-porous surfaces. New VOC-compliant formula contains no CFC and is available in tan and white.

DESCRIPTION	SIZE
Blockout Spray	11 oz.

Sharpie Permanent Markers

Permanent on most surfaces, Sharpie markers feature fade and water resistant ink. Quick drying, AP certified non-toxic ink formula is available in 39 assorted colors and many different tip options.

Spray Inks

Each of these permanent inks is great for stenciling or color coding, dries in just 30 to 60 seconds, complies with CONEG legislation and is environmentally safe. Non-flurocarbon propellant and features new VOC-compliant formula. Contains no CFCs.

- Standard colors include black, red, blue, green, yellow and white
- Packaged in 11 oz. (308g) cans; 12 cans per case

Just a few of the many colors and options are shown.

Spray inks and markers are available in a number of color options.

diagraph MSP

MSSC

Stencil Cutting Machines

Manual machines are portable, versatile, and provide sharp, clear marks. Electric machines provide fast fingertip operation, and are labor efficient for low-cost operation. Over-sized models are also available for larger applications.

Oil Board

Oil board is exceptionally high-quality paper board treated with a special combination of oils to resist ink bleed-through and cut with the grain to maintain rigidity. Ideal for flat or curved surfaces.

- Standard sizes from 5" x 6" (10cm x 15cm) to 24" x 36" (60cm x 90cm); also available: 48" x 300' (120cm x 9m) roll
- Natural oil board available in .007" (.018cm) thickness for use with 1/4" machines and .015" (.38cm) thickness
- Special size sheets and rolls available on request

Stencil Board Selector Guide

Use the chart below to choose the oil board that is right for your application:

LETTER HEIGHT	NUMBER OF LINES TO BE CUT					
	1	2	3	4	5	6
	STENCIL BOARD HEIGHT REQUIRED					
1/4" (6.35 mm)	4"	4"	4"	4"	4"	5"
1/2" (12.70 mm)	4"	4"	4"	5"	6"	6-1/2"
3/4" (19.05 mm)	4"	4"	5"	6-1/2"		
1" (25.4 mm)	4"	5"	6"	6-1/2"		
1-3/4" (44.45 mm)	4"	6-1/2"	11"	11"		
2" (50.8 mm)	4"	7"	11"	11"		

COMPUTERIZED STENCIL CUTTING

Stencil Ink - Non-Porous

Waterproof, permanent and fast-drying for marking on any porous or non-porous surface. Non-porous stencil ink can be used with: stencil fountain rollers, fountain brushes, stencil pads and roller system, or standard spray gun.

Stencil Ink - Porous

Permanent, waterproof, fast-drying ink for marking on porous surfaces such as: paper, cloth, wood, cardboard cartons, etc. Use the porous stencil ink with the following products: the stencil fountain rollers, fountain brushes, M99 Marker, or standard spray gun.

Rollers, Brushes & Ink Pads

The pump action of fountain rollers give you fast and uniform ink dispensing without fading or flooding. Designed to make stenciling easy on any surface, ideal for neat and quick paint application.

Stencil Applicator Roller - Available in 1-1/2" and 3" sizes for porous or non-porous surfaces.

The Stencil Fountain Brush ensures solid stencil coverage and strong clear marks. Great for uneven surfaces such as crates or concrete. Bristles are set in epoxy for long-lasting performance with solvent based inks.

Create your custom coding/marking system with a stencil machine, oil board, inks, and applicators.

Shipping and Caution Labels
- Fragile, Handle with Care
- Caution, This Side Up
- Documents Enclosed

- Glass
- Inventory
- Specialty Labels
- and many more

Circle labels are ideal for product identification, price marking and promotional uses.

There are a number of different styles and sizes of labels available.

ATTENTION ____

INVENTORY DATE ____ COUNT ____ BY ____

EXPORT

PRIORITY

DOCUMENTS ENCLOSED

___OF___

SKID OF ____ ____

PACKED By ____

MIXED LOAD

FRAGILE HANDLE WITH CARE

FRAGILE HANDLE WITH CARE

FRAGILE

PLEASE DO NOT DOUBLE STACK FRAGILE ** THANK YOU **

HANDLE WITH CARE

THIS END UP FRAGILE

FRAGILE DO NOT PUNCTURE

DO NOT OPEN WITH SHARP OBJECT

CAUTION SENSITIVE ELECTRONIC DEVICES

CAUTION STATIC ELECTRICITY DO NOT OPEN

THIS END UP

OPEN THIS END

CAUTION SHARP OBJECTS INSIDE

DO NOT TOP LOAD

caution TOP HEAVY

this side up

UP UP

PALLETIZED SHIPMENT MUST BE DELIVERED INTACT

DO NOT DOUBLE STACK

DO NOT DOUBLE STACK

TOP LOAD ONLY THIS SIDE UP

DO NOT ACCEPT IF DAMAGED

DO NOT BREAK STRETCH WRAP

KEEP DRY

ATTENTION CARRIERS:

REJECTED

KEEP FROZEN

CUSTOMER PICK UP

HOLD DO NOT SHIP

GLASS handle with care

PACKAGING SYSTEMS, INC.

Polyester Cord and Woven Strapping

- Break strengths from 350 to 5400 lbs.
- Manufactured from industrial polyester fibers
- Non abrasive for hand operations
- Can be hand tied or used with inexpensive strapping tools
- Elongation of 11% adds greatly to the energy break with excellent elasticity
- Meets all specifications for postal use, truck transportation, rail and air freight
- Five to six times lighter than steel (approximately 17 lbs. per roll/coil) and is oil free so there is no rust
- Flexibility of strapping makes it easier to hold difficult or unusual shapes

Tying Film

Flat and twisted polyethylene tying film designed for automatic tying machines. Strong and secure without cutting or tearing bundle. Provides greater yield than tying twine at comparable breaking strength. Used by printers, mailers, laundry and linen services as well as nurseries, box manufacturers and foam converters.

Polypropylene Tying Twine

- Strong, pliable, monofilament poly twine ties easily and holds knot well.
- High tensile strength with minimal stretch and exceptional holding power
- Rot, mildew and insect resistant

Cotton Twine

- Versatile and flexible light-duty twine
- Soft, unpolished, natural cotton easily forms tight, strong knots.
- Cotton twine is able to absorb high amounts of water.
- Great for bundling papers and tying packages

Jute Twine

- A natural fiber tying twine
- Use as a general purpose tying twine for wrapping parcels
- Biodegradable

Sisal Tying Twine

- Natural fibers grip firm and provide exceptional knot strength.
- Smooth, strong, moisture-resistant twine will not cut the edges of boxes.
- Great for corrugated cartons, newspapers, lath and lumber
- Totally biodegradable

Natural Sisal Baling Twine

- Knotless, twisted all natural fiber
- Biodegradable and treated against rodents, insects, mildew and moisture
- Natural fibers grip tightly for exceptional strength.
- Recommended for farmers and shipping departments

Nylon Rope

- Strong, flexible and shock absorbent
- Smooth, round **solid braided** nylon rope is for pulleys, blocks, sheaves and winches.
- **Twisted nylon** rope is easy to splice and is used for most general purpose applications.
- **Double braided** nylon rope has a greater strength, elongation and shock absorption.

Polypropylene Rope

- Lightweight, splice able and floatable
- Twisted rope is unaffected by rot, mildew, oil, gasoline, water and most chemicals.
- Hollow braid rope features a smooth, diamond weave exterior and hollow interior that can be used for barriers, tie-downs, floating lines and lifelines.

Sisal Rope

- Biodegradable and pliable rope for moderate tying applications

Manila Rope

- Premium grade, fiber rope that resists abrasion and stretching

Polyester Rope - Twisted

- Strong, twisted polyester is UV, abrasion and weather resistant.

A number of sizes and lengths of twine and rope are available

Cord or Twine may be a good alternative for your strapping application.

Protect your products with poly bags and sheeting that meet your applications' specifications.

Poly Bags are available on rolls or individually cut to fit your application needs. Typical uses include:

- Mattress bags
- Box liners
- Cargo bags
- Bin liners
- Pallet covers
- Truck liners

Pallet covers are available in either shrink or standard types and custom printing is also available.

Gaylord liners, available in .0006 to .010 gauge, are custom made to your specifications to fit any size gaylord box for clean material protection.

Clear Poly Sheeting
Economical protection from dust, dirt and moisture.

- Cover your warehouse equipment, machinery, construction material and skids.
- Giant sheeting is ideal for covering lumber, walls and scaffolding.

Black Poly Sheeting
Conceals as it protects.

- Great for use on construction materials and equipment.

Furniture Covers
Keep furniture and other large items free from dirt and dust with large poly covers.

- 1 Mil bags are perforated on a roll for fast, easy tear-off.

Mattress Bags
Protect mattresses and box springs from dirt and moisture.

- Vent holes allow air to circulate.
- Perforated 1.1 mil bags for fast and easy tear-off

Pallet Top Sheeting
Keeps tops of palleted products protected from settling dust and dirt.

- Sheets can be used alone or with a dispensing system.

Listed are some of our most popular pallet top sheeting sizes:

1.5 MIL (WxH)	2 MIL (WxH)
48" x 48"	60" x 60"
60" x 60"	
72" x 72"	

Clear Pallet Covers and Bin Liners
Large, clear, gusseted poly bags can be used as liners or covers. Protect your products from dust, dirt and moisture while providing visibility of contents or products. Slip gusseted bag over pallet and heat shrink.

- Perforated rolls for easy tear-off
- Perfect for lining cartons or covering machinery, industrial parts or pallets

Listed are some of our most popular pallet cover or bin liner sizes:

1.5 MIL (WxDxH)	2 MIL (WxDxH)	
46" x 44" x 80"	32" x 28" x 72"	52" x 48" x 108"
48" x 46" x 72"	48" x 36" x 72"	54" x 44" x 72"
48" x 46" x 96"	46" x 44" x 80"	54" x 44" x 96"
51" x 49" x 73"	48" x 46" x 72"	58" x 46" x 96"
54" x 44" x 72"	48" x 46" x 96"	
54" x 44" x 96"	51" x 49" x 73"	**4 MIL (WxDxH)**
	51" x 49" x 85"	48" x 46" x 72"
	52" x 48" x 96"	54" x 44" x 96"
		52" x 48" x 96"

Black Pallet Pallet Covers and Bin Liners
Black poly is opaque and protects against pilferage by concealing contents on pallets.

- Protects items from dust and dirt
- Ideal for outdoor storage

Stretch Netting
Stretch netting secures pallet loads without stopping air flow, providing ventilation and keeping condensation from forming on loads. Perfect for the food industry.

Strong, disposable plastic netting is used for containment of small products or debris, especially during transporting.

Palletizing and Packing Products
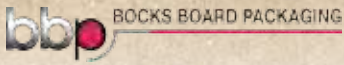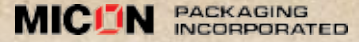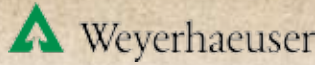
Chipboard Pads

Chipboard pads, sometimes referred to as "slip sheets", provide layers for added protection when stacking products on a pallet. We offer custom packaging, full-color printing (up to 54"), hole punching from 1/8" to 1/2", corner rounding, and custom die-cuts.

- Use as a pad between your product and the pallet, protecting products from the dirt, nails, and splinters common to wooden pallets .
- Prevents bagged products from bulging between the gaps in wooden pallets.
- Use lightweight chipboard pads to top layer cartons to help protect damage from box cutters and knives.
- Sturdy construction from 22 or 30 point kraft fiberboard

Chipboard Pads - Poly Coated on One Side

Poly coated chipboard pads are similar to standard chipboard pads, but have a poly coating on one side of the pad. Poly coating is moisture and bacteria resistant, non-porous, more hygienic, and offers a higher tensile strength than chipboard pads alone.

Corrugate Roll

Corrugate rolls are available from 2" to 84" wide. This product can also be sheeted and die cut.

Singleface is used for the following applications: lining containers and trucks, wrapping pallets on trucks, protecting products from dust, nails and splinters, and lining railcars.

Corrugated Layer Pads

Corrugated layer pads provide layers to separate items, particularly for layers on skids or inside packaging. Place between layers of product for protection and to disburse weight.

- Pads are sized to fit the most commonly used box sizes.
- Top layering protects products when box is being cut open.
- Pads help keep tops of products dust free during storage.
- Helps prevent strapping and forklift damage

Single Wall Corrugated Sheets
- Manufactured from 200#/ECT-32 kraft corrugated

Double Wall Corrugated Sheets
Use Double Wall Corrugated Sheets to stack heavy items and provide extra durability and strength.
- Manufactured from 275#/ECT-48 DW kraft corrugated

Triple Wall Corrugated Sheets
Use Triple Wall Corrugated Sheets between layers of heavy machinery and appliances.
- Manufactured from 1100#/ECT-90 TW kraft corrugated

Corrugated Dividers - Wax Coated on One Side

Corrugated divider sheets increase the stability of your unitized load, allowing higher stacking per pallet. They also prevent slippage during transit. Wax coated on one side for added protection.

White Corrugated Sheets

Recommended for separating layers on skids or inside packaging.

- Constructed from 200#/ECT-32 white corrugated (white on one side)
- White Sheets offer a nice clean look and help the layer separations stand out.

Honeycomb Sheets

- Use flat between pallets for superior cushioning strength.
- Constructed from compressed paper that is lightweight, yet durable.
- Can be cut easily with a knife and used as void fill.
- An eco-friendly product that is 100% recyclable and 100% biodegradable.

Anti-Slip Pallet Paper

Great for stabilizing loads on pallets or to prevent items from sliding during shipment.

- 80# kraft paper is non-toxic, reusable and 100% recyclable.
- Anti-slip treatment is durable and remains effective for extended periods of time.
- Fit pallets 48" x 40"

Plastic Sheets

Protect shipments from dust and dirt.

- Constructed from rigid 3/16" thick polypropylene
- Dirt, grease and water resistant
- Durable and reusable
- Available in black or white

Plastic Slip Sheets

Plastic slip sheets are sheets of thick plastic with a 3-6 inch lip (referred to as a pull tab) on one or more sides that are handled using specialized push/pull attachments mounted on fork lifts.

- Slip sheets cost about 85 percent less than wood pallets.
- Less space is needed for storage and in transport.
- Lightness reduces transportation costs.
- Plastic slip sheets are recyclable in a closed-loop system, where old slip sheets can be recycled into new ones.

1000 Plastic Slip Sheets vs. 20 Wood Pallets

Dunnage Air Bags

Dunnage air bags are paper bags, constructed of multiple layers of paper and designed with an inflatable internal polyethylene bladder. They are the most economical and reliable means of securing the load in your truck trailer, rail car, sea container or vessel. The purpose of the dunnage air bag is to reduce the shifting of the loads occurring during transport which will result in customer satisfaction because of no damage or returned goods.

Dunnage air bags are reusable and are made from high tensile lightweight kraft paper. When inflated, dunnage air bags will expand to fill a much larger void than other air bags. They are also more flexible, giving them the advantage of filling up almost any empty space, and conform to odd configurations without damaging the cargo!

What is the maximum void recommended to use a dunnage air bag?

- For void less than 8" (20cm): 24" wide (60cm) dunnage air bag
- For void between 8" (20cm) and 12" (30cm): 36" wide (90cm) dunnage air bag
- For void between 12" (30cm) and 16" (40cm): 48" wide (1200cm) dunnage air bag
- For void between 16" (40cm) and 20" (50cm): 60" wide (1500cm) dunnage air bag
- For shipment by rail the void cannot exceed 12" (30cm) after inflation

Shurtape

Allsafe SMC

Kimberly-Clark

MAJESTIC RELIABLE IN SAFETY
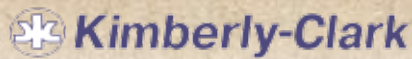
Vinyl Aisle Marking and Safety Tapes

Vinyl tape is used in a wide variety of different applications, such as color coding, wrapping, and aisle marking. Thin, durable and resistant to tearing; stabilized, plasticized, shiny, polyvinyl chloride (SPVC) film; non-corrosive natural rubber adhesive.

Many sizes available; colors available include yellow, orange, white, red, black, blue, green and yellow/black.

DESCRIPTION	CTN CT	ITEM CODE
Yellow Vinyl Tape		
2" x 36 yd. 5.5 mil	24	VP410-2X33Y
3" x 33 yd. 5.5 mil	24	VP410-3X33Y
4" x 33 yd. 5.5 mil	24	VP410-4X33Y

OSHA Safety Colors

Caution: Yellow/Black or Yellow: physical hazards, poles, stairs, and corners

Danger: Red/White or Red: fire protection equipment and obstructions

Boundaries: White/Black, Orange, White, Green and Blue: housekeeping and traffic markings

Hard Hats
- Lightweight hats engineered to provide comfort, head protection, balance and stability
- Comfortable heavy duty hard hats with adjustable six-point nylon suspension for custom fit
- CoolMax terry cloth headband
- Ratchet holds hard hat in place for secure fit
- A number of different colors and styles are available.

Safety Glasses
- Can be worn alone or over most prescription eyeglasses
- One-piece polycarbonate front with adjustable temples
- A number of different frame types and lens colors are available.

Ear Plugs
- Roll and insert ear plug into ear
- Available with or without cord
- A number of different styles are available.

Dust Masks & Respirators
- Designed to filter out contaminants, liquid aerosols, dust and pollen
- Fits snug yet comfortably without leaks
- A number of different styles are available.

Industrial Gloves

Many Industrial workers need durable, high-performing gloves that provide dexterity and tactile sensitivity, while also protecting against hand injuries.

- Industrial gloves are available in chemical resistant, cut resistant, coated or thin mil grades
- Sizes from XS to XL (7 - 11)

Disposable Gloves
- Disposable gloves are available powdered or non powdered
- Sizes from XS to XL (7 - 11)

Desiccants

A variety of desiccants are available to protect your product during transit.

First Aid Kits

A number of different first aid kit content options are available for the workplace, vehicle or home.

We Carry a Complete Line of Safety Supplies
- Hard hats
- Safety glasses and goggles
- Ear plugs and hearing protection
- Dust masks and respiratory protection
- Industrial gloves
- Disposable gloves
- Desiccants
- Wipes
- First aid kits
- Safety and barrier tape
- Thermal winter wear
- Cooling summer sweatbands
- Fall protection
- Back support belts
- Tool belts

Standard Utility Knife

Retractable utility knife has an ergonomic handle with an overlock nose for blade stability.

- Constructed from high quality die cast metal
- Ergonomic handle
- Overlock nose for blade stability
- Includes 3 standard utility blades

Scraper Knife

- Heavy-duty metal construction
- Brass slider locks blade into position
- Jam-proof button
- Includes 1 single edge blade

Economy Steel Box Cutter

- All metal construction
- Easy blade change
- Glossy painted finish
- Includes 1 single edge blade

Safety Grip Utility Knives

Safety grip handles put your safety first!

- Ergonomic handle
- Features a non-slip grip surface to reduce slippage
- High quality die cast metal

Safety Cutter Utility Knife

Three tools in one: cutter, tape splitter and film cutter.

- Features integrated, replaceable film cutter that flips open, and a convenient 5 blade storage compartment within the handle.
- When locked into film cutter position, the safety lock-out system prevents the box cutting blade from extending.
- Utility knife includes one Safety Point Blade.

Stretch Film Cutter

Angled cutter easily cuts through stretch film.

- 6-1/2" long Stretch Film Cutter features an easy grip handle and a metal blade.

Carton Sizer/Reducer

Cut boxes to the exact size required!

- Carton Sizer/Reducer makes cutting boxes down to the desired depth fast and easy.
- Saves money by requiring less void fill.
- Ruled for precise measuring.

Wipes

Professional industrial wipes replace towels and rags. Wipes are reinforced for extra scrubbing and cleaning power, yet soft enough for face and hands.

Box of Rags

Withstands industrial wiping and polishing applications.

- Soft and absorbent.
- Cotton/polyester blend.
- Available in new white knit or sanitized reclaimed white knit.

Scrubs In-a-Bucket® Hand Cleaner Towels

Pre-moistened, heavy-duty towels easily remove soil from your hands.

- Use on tools, equipment and work surfaces.
- Works fast on dirt, oils, adhesives, lubricants, paints, grease, tar, urethanes, epoxies, inks and dyes, sealants and caulks.

Ladders

- Extension Ladders
- Stockers Ladders
- Step Ladders
- Scaffolding
- Aluminum or Fiberglass
- Many different sizes and styles available

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Machines, Tools and Supplies (by Section)

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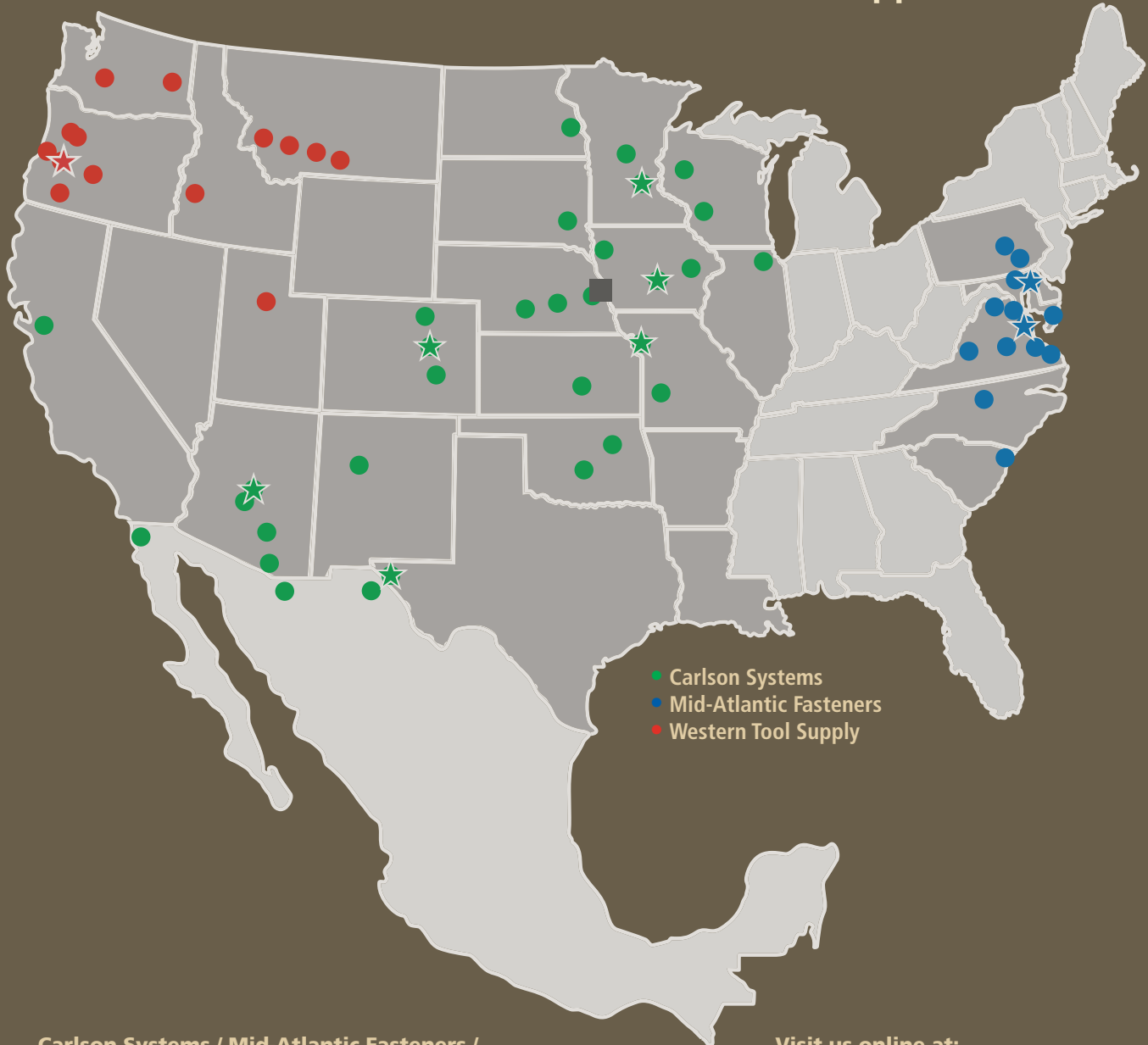Phone: 425-488-7222

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