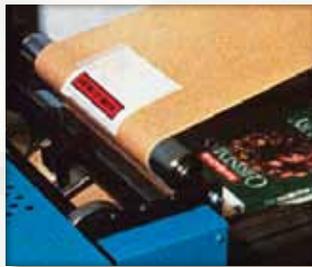


& Cro-nel[®] Nyvel[®]

The original cohesive protective packaging wrap



Cro-nel® & Nyvel®

Advantages of using the original cohesive wrap

Performance

Originally developed by DuPont® and the Crowell Corporation, Cro-nel® and Nyvel® insure the integrity of your products both in-house and in-transit by providing a strong, lightweight package that is abrasion and moisture resistant. Cold-Seal, self-sealing technology adheres to itself and not your product. The Cro-nel® and Nyvel® Series offer a wide range of strength and cushioning combinations to provide product-specific applications. Both Series provide a tough, tear and puncture resistant outer shell of paper, linerboard, or film to create an airtight package, customized to be either highly flexible or extremely rigid with self-mailing capabilities. The cushioning of the Cro-nel® Series is provided by the high cling, low slip, and low static characteristics of Microfoam® and gently molds to the product alleviating surface abrasion while leaving no residue on your products as adhesives frequently do.

Surface protection

Completely encasing your product, Cro-nel® and Nyvel® act as a protective shell that moves with your product, forcing rub to the exterior outer shell of our laminated protective wrap and virtually eliminating surface damage. The completely airtight enclosure also protects from dirt, grease, and moisture.



Made of Polypropylene Microfoam®

Microfoam® cushioning provides superior high cling, low slip protection to the Cro-nel® Series while our specially formulated cohesive coatings reduce static electricity charges present in uncoated packages. Even after repeated impacts, Microfoam® continues to perform as an effective cushioning material due to its closed cell foam structure.



Easy to use

Instantly sealing by the use of pressure, not heat, Cro-nel® and Nyvel® cohesive laminates eliminate the need for additional fasteners such as tape or staples. Cohesive laminates also create a secure, tamper-evident pack with self-mailing capacities similar to a padded mailer envelope. The laminates are applied around your product by hand or with automated equipment as needed.

Laminates offered

The Cro-nel® series consists of a Kraft paper or Linerboard outer shell, Microfoam cushioning and a cohesive coating. The Cro-nel Plus® series consists of a Film outer shell, Microfoam cushioning and a cohesive coating. It is available in custom perforations. The Nyvel® series consists of a Kraft paper or Linerboard outer shell and a cohesive coating. Nyvel PE® consists of a Film outer shell and a cohesive coating and it reveals the product to the consumer for confirmation and/or advertising. All Series are offered in custom roll widths. Our standard roll lengths are listed on the specification sheet.

Reduce damage

By encasing your product, Cro-nel® and Nyvel® leave no exposed surfaces. By gently locking your product in place, they reduce movement during shipping or handling, eliminate surface damage, and provide critical corner protection. The product position in relation to the box remains intact throughout shipping, not settling like polystyrene peanuts or allowing movement like air-pack solutions.

Cost savings

In packaging, decreasing damage is the easiest way to save money. Speed and ease of application minimizes labor costs and raises productivity while ease of removal enhances customer satisfaction with your delivered product. Using Cro-nel® and Nyvel® reduces inventory SKU's by providing a wide range of capabilities using the same laminate wrap. By conforming to the product shape, our cohesive laminates use only the size required for product coverage, eliminates the need for void fill thus minimizing container size and reducing transit cost.

Cro-nel® & Nyvel®

Packaging applications

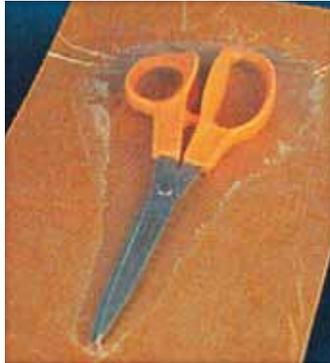


advertising
aerospace parts
anti-slip solutions
appliances
audio / visual equipment
automotive equip / parts
banking
bark or root protection
books / publishers
catalog retailers
CD's & DVD's
ceramics
chemicals
china
circuit boards
clothing
computers
contracts

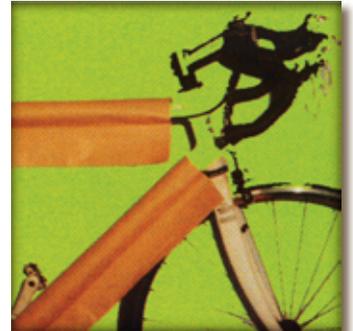


cosmetics
creating a mailer
e-commerce
electrical parts
electronics
extruded parts
farm equipment
finished surfaces

finished wood
floral cuttings / supplies
frames
furniture
glass
hardware
health / beauty suppliers
house wares
industrial supplies
in-house handling
injection molded parts
Interior pack wrapping



instruments
jewelry
law enforcement equipment
legal documents
lighting fixtures
magazines
mail order products
marine supplies
medical equipment
medical supplies
metals
moving industry
office supplies



optical goods
outdoor furniture
painted parts
pharmaceuticals
plaques
plumbing / heating supplies
promotion
recreational equipment
rolled goods
samples
service parts



signs / advertising
software
spooled goods
sporting goods
stationer finish goods
tools
tree wrap
windows / doors
wire goods

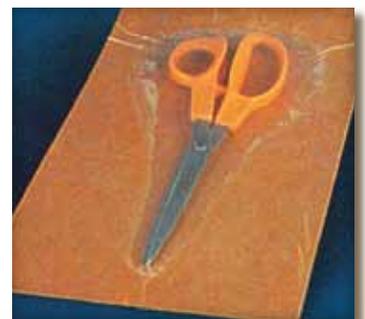
Cro-nel® Dispenser Pack

Easy to Use, Easy to Shape, Create your own Packages!



Benefits of Using Cro-nel

- Sticks to itself and not your product
- Cost effective by saving labor, time, and material
- No additional fasteners such as tape required
- Reduces static
- Provides slip resistance to eliminate rub issues
- Kraft provides an outside writing surface
- Secure and tamper-evident
- Cushioning incorporated using Microfoam®
- Clean, airtight encasement
- Non-abrasive and moisture resistant
- Single roll delivered in a dispenser pack
- Eliminate need for multiple mailer sku's
- USPS & UPS approved



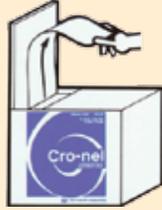
Cro-nel MD & DP 60# kraft paper shell & 1/16" Microfoam® & cohesive coating
All Dispenser Packs come slit 12" wide x 250 LF/roll; (1) roll per Dispenser Pack.

Cro-nel Dispenser Pack

To use dispenser



Open by cutting tape that holds both sides of carton top.



Lift flap. Pull out material with steady, upward motion.



To cut, hold flap down firmly at far edge, and pull material towards you.

Packaging techniques - tear off amount of material you need.



Position item on material.



Form package by folding material over item. Press inside surfaces together.



A one-inch seal is adequate for most packages.

Or...



Center item on material.



Align and press together top edges of material.



Tuck ends and seal.

Why use multiple pouch sizes when one size Cro-nel will do?

Pouch Size	Dispense Cro-nel Sheet Size	Makes Cro-nel Pouch Size
4" x 8"	12" x 8"	6" x 8"
5" x 10"	12" x 10"	6" x 10"
6" x 10"	12" x 10"	6" x 10"
7-1/4" x 12"	12" x 14-1/2"	12" x 7-1/4"
8-1/2" x 12"	12" x 17"	12" x 8-1/2"
7-1/4" x 14-1/2"	12" x 29"	12" x 14-1/2"
9-1/2" x 14-1/2"	12" x 29"	12" x 14-1/2"
10-1/2" x 16"	12" x 32"	12" x 16"
12-1/2" x 19-1/2"	12" x 38"	12" x 19"

Keep Cro-nel Dispenser Pack available... ready to use whenever you need it!

Store dispenser at room temperature, away from radiator or high heat. If stored at cold temperatures, allow to warm up to room temperature before using. Keep flap closed when not in use.

Pre-wrap rubber items and uncoated brass or copper before packaging.

Cro-nel is a registered trademark of Automated Solutions, LLC. This grade of Cro-nel is manufactured under the U.S. Patent No. 4,086,384 and other foreign patents.



Specification sheet

Cro-nel®

Cushioned Cohesive Laminates

Paper or Linerboard + Microfoam® + Cohesive Coating

Series	Outer Shell	Foam** Thickness	Max Width	Standard Lengths
Cro-nel LD	30# kraft paper	1/16"	72"*	1600'
Cro-nel MD	60# kraft paper	1/16"	72"*	1600'
Cro-nel Dispenser Pack	60# kraft paper	1/16"	12"*	250'
Cro-nel HD	42# Linerboard	1/16"	72"*	1400'
Cro-nel S-4	42# Linerboard	1/32"	72"*	1400'

* Standard slit widths include 6", 8", 9", 12", & 15".

Suggested Applications of Cro-nel

Books, appliances, mail order items, tools, blades, industrial parts, housewares, office supplies, signs, finished metal, furniture, ceramics, china, glass, plaques, frames, electrical parts, bark protection, samples, instruments, pharmaceuticals

Cro-nel® Plus

Cushioned Cohesive Laminates

Film + Microfoam® + Cohesive Coating

Series Thickness	Outer Shell Width	Foam** Lengths	Max	Standard
Cro-nel Plus Regular	.75 mil film	1/32"	72"*	600'
Cro-nel Plus Super	2.3 mil film	1/16"	72"*	500'

* Standard slit widths include 6", 8", 9", 12", & 15".

Suggested Applications of Cro-nel Plus

Flexible solutions, mail order items, tools, injection molded parts, industrial parts, sporting goods, housewares, office supplies, computers, signs, finished metal and wood, furniture, ceramics, china, glass, plaques, frames, electrical parts, instruments, pharmaceuticals, samples, marine supplies

Nyvel®

Cohesive Laminates

Paper or Linerboard + Cohesive Coating

Series	Outer Shell	Foam** Thickness	Max Width	Standard Lengths
Nyvel MD	60# Kraft Paper		72"*	600'
Nyvel HD	42# Linerboard		72"*	600'
Nyvel XHD	69# Linerboard		72"*	500'
Nyvel PE	Various Film Thicknesses		72"*	500'

* Standard slit widths include 6", 8", 9", 12", & 15".

Suggested Applications of Nyvel

Books, documents, creating mailers, mail order items, visual solution, tools, blades, industrial parts, housewares, office supplies, signs, finished metal and wood, plaques, frames, electrical parts, bark protection, instruments, samples, pharmaceuticals

Most products are available in slit rolls or sheeted goods. Standard perfs for the Cro-nel Plus series include 0", 6", 8", & 12". Both custom roll lengths and slit widths are available. **Microfoam® is manufactured in thicknesses of .060 approximately 1/16" and .050 approximately 1/32". Cro-nel & Nyvel are registered trademarks of Automated Solutions, LLC. Manufactured under one or more US and foreign patents.

Providing innovative solutions

About Automated Solutions, LLC

In addition to our packaging products, Automated Solutions, LLC has been the primary manufacturer of most of our packaging equipment that we employ in the manufacture of multi-layer packaging bags, polyethylene and polypropylene cohesive products; and extruded polyethylene foam profiles. We have been in the industrial machinery design and manufacturing business for 48 years building computerized, custom machinery for a diverse array of industries including aerospace, furniture, construction, utility, oil drilling, textile and automotive. Automated Solutions, LLC also manufactures a leather cutting, optimization and digitizing system, a fabric flow-match cutting nesting system and a CAD digitizing software package for the furniture and automotive industries as well as precision perforated replacement cutting surfaces for fabric and leather cutting machines. With our machinery manufacturing background and the flexibility that offers to us and our customers we often say:

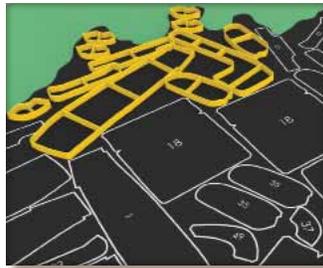
Your problem is our opportunity!



Replacement cutting surfaces
www.cuttingbelts.com



DuraGuard® & EcoPak® protective bags



HideSaver® leather nesting system
www.hidesaver.com



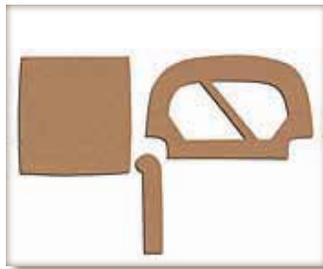
Cronel® & Nyvel® cohesive products



Specialty packaging solutions



MatchWizard® automatic fabric matching system



QuickDigit® automatic digitizing system



Wrap-it® cohesive products

automatedsolutionsllc.com

Automated Solutions, LLC

4101 US Hwy 321-A
Sawmills, NC 28630
Phone (828) 396.9900
Fax (828) 396.0025

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Nyvel[®]

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