



## AUTOMATION IN PACKAGING, VOL. 2

Equipment OEMs speak out. Story on Page 12.

Full results at [www.packagingdigest.com/automationresearch](http://www.packagingdigest.com/automationresearch)



Reed Business  
Information®

August 2008

# PACKAGING DIGEST

[www.packagingdigest.com](http://www.packagingdigest.com)

## Funky bean

Organic roaster bags coffee  
in 'earth-lovin' pouches 6



CLICK HERE TO

**RENEW**

your FREE **magazine**  
subscription

CLICK HERE TO

**START**

a FREE **e-newsletter**  
subscription

New line injects business 38

Production keeps popping 48

Bobbing with beer cans 50





**Hitachi values  
the importance  
of recycling.  
That is why we  
have taken our  
best features  
and made them  
even more  
environmentally  
friendly.**

**Hitachi has the  
first Continuous  
InkJet Printer  
to meet RoHS  
Environmental  
Standards.**

*See us at  
PACK EXPO International  
Booth #N-3569*



Reliability continues with  
state of the art internal components,  
upgraded hardware and software and  
low cost of maintenance.

## **THE NAME YOU KNOW AND TRUST**

Hitachi America, Ltd.; 5808 Long Creek Park Drive, Suite Q, Charlotte, NC 28269  
Tel: 704-494-3008 ; Fax: 704-494-3799 ; [inkjetprinters@hal.hitachi.com](mailto:inkjetprinters@hal.hitachi.com); [www.hitachi.us/ijp](http://www.hitachi.us/ijp)

**HITACHI**  
Inspire the Next





# SHARP<sup>TM</sup>

Packaging Systems

***The Sharp Choice:  
The innovative manufacturer  
of flexible packaging systems,  
pre-opened bags on a roll  
and bagging machinery***



**Sharp MAX Plus<sup>TM</sup>**



**Sharp SX<sup>TM</sup>**



**Sharp MAX<sup>TM</sup>**



Designed and Built  
in the U.S.A.



# SHARP<sup>TM</sup>

Packaging Systems

P.O. Box 124,  
N62 W22632 Village Dr.  
Sussex, WI 53089  
262-246-8815 Fax: 262-246-8885

**800-634-6359**

**[www.sharppackaging.com](http://www.sharppackaging.com)**



# contents

AUGUST 2008 volume 45 no. 8



## features

- 6 COVER STORY** Biodegradable coffee bags debut for Larry's Beans.
- 26 PACKAGING PARTNERS** Rexam and Eli Lilly produce an insulin injection pen.
- 30 MED/PHARMA HOLOGRAPHY** Holograms defend against counterfeiting.
- 38 VIAL FILLING** New line aids HollisterStier's growing sterile injectables business.
- 42 SOFTWARE** Proofreading software helps pharma packer Catalent handle rules.
- 50 BEER-CAN TRANSFORMATION** Packaging line produces unique fishing bobbers.
- 52 PALLET WRAPPING** VersaCold's economical stretch wrappers deliver stable loads.
- 57 INK-JET CODING** Bell Lab's new pail coder tackles some tough treatment.

## new technology

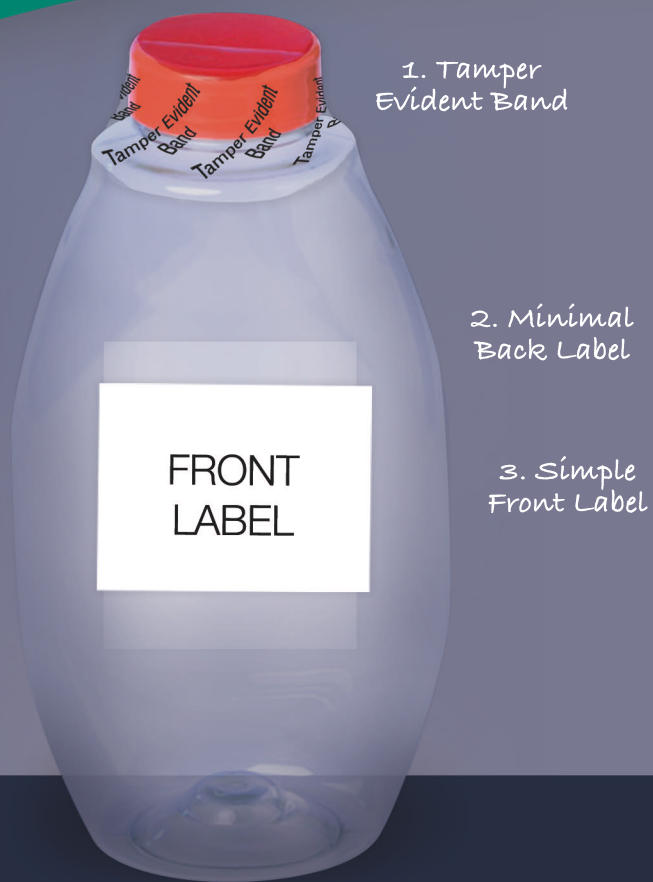
- 34 SUSTAINABILITY** Medical packaging can be sustainable, too.
- 48 AUTOMATION & CONTROLS** PC controls keep popcorn baggers popping.
- 61 TRADE SHOW** HBA Global Expo returns to the Big Apple, Sept. 9 to 11.

exclusively on the  
 web

**2008 Automation in Packaging survey results, Volume 2**

Second in a three-part series on the Automation in Packaging benchmark study. *PD* and *Control Engineering* surveyed machine builders to understand the stresses and opportunities facing their businesses, and their perceptions. Includes key findings, business demographics, machine design and functionality, an automation profile, top equipment features, key brand differentiators, verbatim suggestions for OEMs from packagers, an article by *CE*'s David Greenfield on shifting safety responsibility and much more. For complete results, visit the *Packaging Digest* study microsite at [www.packagingdigest.com/automationresearch](http://www.packagingdigest.com/automationresearch)





3 in 1  
Secure, Eye-Catching  
Informative  
Full Body  
Shrink Sleeve



## Want More From Your Label?



# GILBRETH

3001 State Road, Croydon, PA 19021

800.630.2413

[www.gilbrethusa.com](http://www.gilbrethusa.com)



Why Settle for Less? Shrink Sleeve Labels Give You More.

**More...** Label Coverage.  
Design Flexibility.  
Shelf Presence.  
Safety and Security.  
Environmentally Friendly.  
Sales Guaranteed.

Let Us Dispel All of Your  
Myth-Conceptions  
About Shrink Sleeves.

See us at  
Label Expo 2008 - Booth 3539  
& Pack Expo 2008 - Booth 3150

Expect MORE From Your Label.



# departments

- 6 DESIGN TRENDS** Beverages
- 12 COMMENT** Automation study, Part Two of Three
- 15 NEW EQUIPMENT** Form/Fill/Seal & Bagging
- 22 NEW MATERIALS** Rigid Containers
- 46 AUTOMATION & CONTROLS**
- 62 SUSTAINABILITY** Getting to sustainable solutions
- 64 SYSTEM INTEGRATION** Contractors vs integrators
- 65 NEWSMAKERS**
- 66 INFO SHOWCASE**
- 69 MARKETPLACE**
- 71 AD INDEX**
- 72 ONPACKAGINGDIGEST.COM**



# staff

## Editorial/Production Offices

2000 Clearwater Dr., Oak Brook, IL 60523

630/288-8000 Fax 630/288-8750 e-mail: [packagingdigest@reedbusiness.com](mailto:packagingdigest@reedbusiness.com)



**John Kalkowski**, Editorial Director  
630/288-8706 [john.kalkowski@reedbusiness.com](mailto:john.kalkowski@reedbusiness.com)  
**Lauren R. Hartman**, Senior Editor  
630/288-8749 [lhartman@reedbusiness.com](mailto:lhartman@reedbusiness.com)  
**Jack Mans**, Plant Operations Editor  
630/288-8747 [jmans@reedbusiness.com](mailto:jmans@reedbusiness.com)



**Linda Casey**, Associate Editor  
630/288-8746 [linda.casey@reedbusiness.com](mailto:linda.casey@reedbusiness.com)  
**Tim Avery**, Assistant Editor  
630/288-8701 [tim.avery@reedbusiness.com](mailto:tim.avery@reedbusiness.com)  
**David Bellm**, New Media Editor  
630/288-8757 [david.bellm@reedbusiness.com](mailto:david.bellm@reedbusiness.com)

Lora Lee Gelles, Art Director, 630/288-8566. [lgelles@reedbusiness.com](mailto:lgelles@reedbusiness.com)

Joy Tan-Pipilas, Production Editor, [mtan@reedbusiness.com](mailto:mtan@reedbusiness.com)

Christina Kayalik, Production Manager, 630/288-8431, [christina.kayalik@reedbusiness.com](mailto:christina.kayalik@reedbusiness.com)

Michelle Vaccaro, Web Prod. Manager, 630/288-8533, [michelle.vaccaro@reedbusiness.com](mailto:michelle.vaccaro@reedbusiness.com)

Mark DiVito, Group Research Director, [mark.divito@reedbusiness.com](mailto:mark.divito@reedbusiness.com)

Rose Logusz, Classified Production, [rlogusz@reedbusiness.com](mailto:rlogusz@reedbusiness.com)

Lisa Stephens, Ad Services Coordinator, [felecia.stephens@reedbusiness.com](mailto:felecia.stephens@reedbusiness.com)

Tad Smith, CEO

Jeff Greisch, President, Chicago Division

John Poulin, Senior Vice President, Finance



**Steven Reiss**, VP, Publishing Director  
630/288-8807  
[sreiss@reedbusiness.com](mailto:sreiss@reedbusiness.com)

**Robert Heitzman**, Publisher Emeritus  
630/288-8735  
[rheitzman@reedbusiness.com](mailto:rheitzman@reedbusiness.com)

## The Leader in High Speed Video...

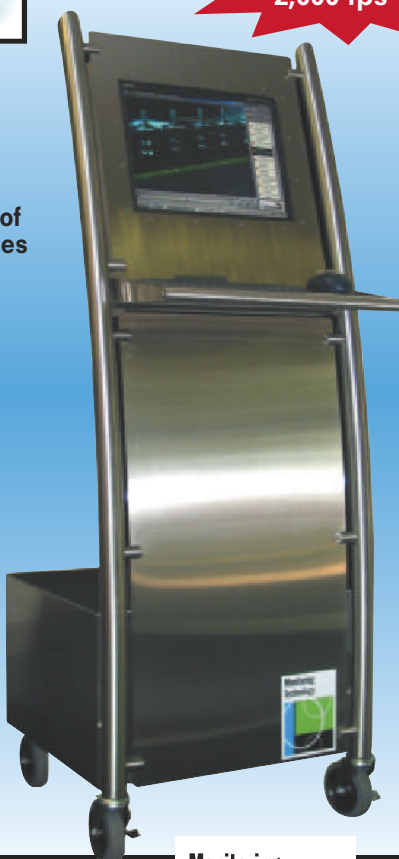
20/20  
**HINDSIGHT**

Records over  
2,000 fps

**With 20/20 Hindsight® you can...**

- Increase OEE and eliminate production downtime
- Quickly identify the root cause of packaging and production issues
- Point camera and walk away... replay issues in slow motion
- Get an instant return on your investment
- Store over 48 hours of video
- Reduce change-over time and increase line speed
- Improve operator training and shift-to-shift communication
- Share video with vendors and reduce product defects
- Multi-Camera Systems, Infrared cameras, Borescopes, other options also available

**Call 703-698-5520  
for a FREE Trial**



Monitoring  
Technology



or visit us at  
**[www.2020HindSight.com](http://www.2020HindSight.com)**

E-mail:  
**[Sales@2020HindSight.com](mailto:Sales@2020HindSight.com)**

See us at PACK EXPO Booth # S-2787



3005 State Road, Telford, PA 18969

Phone: 215-721-4600

[equipmentsales@fresco.com](mailto:equipmentsales@fresco.com)

[www.fresco.com](http://www.fresco.com)

**The innovative leader in  
flexible packaging systems**



## Multi-Lane Stick Pack machine

**Stick Pack or  
Pillow Pouches**

- designed for dry or liquid
- cycle rates up to 100/min.
- bag widths up to 75 mm
- up to 22 lanes across



Continuous Motion  
4 Sided Seal Pouch



See us at PACK EXPO Booth # S-350



# Thanks.



When it comes to weighing and packaging your products, WeighPack's your remedy. We offer complete system integration along with exceptional service, expert technicians and the absolute best prices. Think of us as your single source solution. Call 1-888-934-4472 or visit [weighpack.com](http://weighpack.com). And you're very welcome.

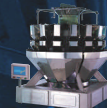


Booth # S-842  
November 9-13  
Chicago, IL

**WEIGHPACK**  
SYSTEMS INC.

LAS VEGAS MONTREAL SHANGHAI

Expect MORE



FILLINGSOLUTIONS



BAGGINGSOLUTIONS



CONVEYINGSOLUTIONS



# design trends beverages

## 'Earth-lovin' bio-bags debut for coffee

Larry's Beans, a coffee roaster/marketer in Raleigh, NC that buys green coffee beans directly from Fair Trade co-ops, aims to wake up consumers to smell an "awesome-tasting coffee packaged in ways to make the world better." Exhibited at April's All Things Organic show in Chicago, the organic coffee meets Fair Trade, shade-grown organic standards, according to Larry's, and has a real coffee-house vibe. Packed in the company's new 12-oz and soon-to-be-released 1-lb biodegradable polyethylene/metalocene standup bags that are flexo-printed in eight colors with waterbased inks. Incorporating Green Film™ biodegradable technology from **Maverick Enterprises** ([www.maverickent.net](http://www.maverickent.net)), the new bags were designed by **The Change** ([www.changestrategy.com](http://www.changestrategy.com)), and are made and printed by **Cadillac Products** ([www.cadprod.com](http://www.cadprod.com)). The bags contain an additive that Larry's says helps micro-organisms break them down into humus, leaving no harmful residues. Said to biodegrade in about nine months in a compost heap, a landfill or commercial composting facilities, the bags display funky '60s-style graphics that relate to the interesting coffee variety names, including Frank Sumatra, Bean Martin, Costa Little Ricky, Cowboy Blend and El Salvador Dali. All of the bags are printed with copy that reads, "This is a new generation of earth-lovin' bag: It biodegrades in landfills, or it composts in your own backyard (In about 9 months it'll be dirt)." Says founder Larry Larson, "Ultimately, we'd like to look to a truly cradle-to-cradle system, where nothing is thrown away. But in the meantime we're pleased that this is a big step in the right direction."



## Russian tea package 'eyes' new niche

As the Russian tea market is becoming increasingly competitive, pushing brands into new niches, Imperial Tea Co., which specializes in premium tea brands, felt the need to extend its product line with a more playful product aimed at kids. Imperial called on **Soldis Communications Agency** ([www.soldis.ru](http://www.soldis.ru)) for advice on the product's creation, positioning and design. Available in tropical fruit, strawberry, forest berry and black tea, the product, in 15 bags, is packed in a proprietary SBS folding carton, offset-printed in four colors with vivid, fun-filled graphics. Research into kids' preferences showed that children are highly kinetic and tactile; if they like something, they want to touch and play with it. Therefore, the tea package had to become a toy itself. Soldis designers devised the portioned package illustrated with large round eyes. Four cubic segments united to form the carton, are joined with or separated from the others by a combination of scores and perforations so that the carton can be transformed to form four different illustrations of a face that changes expression depending on the segment. Each segment holds 15 teabags. A toy puzzle is also included in each package.

## Spill-proof cup is small enough to sip

TummyTickler juice for toddlers now comes in 4-oz bottles sold in eight-count packs. Seen at the FMI show in Las Vegas in May, the product is marketed by IN ZONE® Brands. Each package includes a reusable topper featuring a popular character from Disney, HIT or Scholastic and has a spill-resistant valve that functions like a sippy cup. The plastic bottle is designed for smaller hands to grip easily. TummyTickler—which first launched in 8-oz servings—features 100-percent apple juice with no added sugar. "Parents love the spill-proof design, and now kids have fun drinking more of the TummyTickler juice they love with their favorite characters, again and again," says CEO Jim Scott. The eight-packs are available this summer in Target stores and regional grocers; the 11-packs can already be found at Wal-Mart Supercenters.



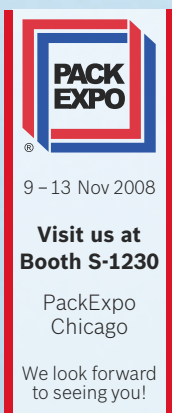
## Droplet-shaped bottle pours forth organic vodka

Rain Organics vodka (yes, certified organic by the U.S. Dept. of Agriculture) is made from organically grown white corn and smells of pear drops. Rain has the "satiny taste of sweet grain," according to its maker, Buffalo Trace Distillery, Frankfort, KY. But its glass bottle, a proprietary, blue-to-clear frosted raindrop-shaped decanter, speaks volumes for its brand name. Considered "cosmetic quality," the bottle, in 50- and 750-mL and 1- and 175-L sizes, is stoppered with a proprietary blue glass-topped cork closure. Designed by **SPAR, Inc.** ([www.sparadvertising.com](http://www.sparadvertising.com)), New Orleans, the package was spotted at the All Things Organic Show in Chicago. The bottle for the 80-proof vodka is screen-printed in blue with a large Rain brand logo, details about the beverage, including the fact that it's distilled seven times, and the requisite rain droplets, one of which dots the "i" in Rain. Buffalo Trace notes that when the vodka is ready for bottling after 20 days of milling, cooking and fermenting, it's pumped into stainless-steel tanks and stored for several months. Then it's pumped to a bottling tank where it's proofed, filtered and dispensed into the bottles, which are first inspected for nicks, cuts and scratches before being air-cleaned. Each bottle is visually inspected and then case-packed by hand, reports Buffalo Trace.





# Bosch. Vertical bagging like you have never seen before.



If you are looking for VFFS – vertical, form, fill, seal packaging that is out of the ordinary, that is as special and unique as your product, Bosch Vertical Baggers is the partner for you. Bosch has proven expertise in vertical packaging technology, which provides flexibility and innovation to your packaging line. As a solution-based supplier, Bosch offers a variety of packaging styles, maximum efficiency and investment value. Bosch serves all the industries with free-flowing goods. Superior service support from Bosch Packaging Services guarantees regional presence and product know-how you can trust. Day or night. Around the clock.



**BOSCH**  
Invented for life



## Bosch Packaging Technology

Vertical Baggers

Phone: +1-715-246-6511 | Fax: +1-715-246-6539

sales@boschvertical-us.com | www.boschvertical-us.com



# design trends



## Oh Boy! Beef jerky in a clear canister

Oberto is converting its established Oh Boy! Beef Jerky retail pack to a new container called Velocity™ from **Huhtamaki** ([www.huhtamaki.com](http://www.huhtamaki.com)). Oberto wanted to jumpstart the container's graphics presentation and sustainable benefits for the growing individually-wrapped beef jerky sticks market. The resealable Velocity package is part of Huhtamaki's paperboard in-plant packaging system that has been part of its core business for years. Velocity is a moisture-resistant polypropylene canister with sidewalls that are formed around mandrels on equipment similar to paperboard canister-forming equipment that Huhtamaki designs and builds. The clear sidewalls are offset-printed in 6 colors with 100-percent ink coverage possible on opaque and clear sheet. The top of the canister provides a view to the 30 individually wrapped jerky sticks. Capped with a snap-on overlid, the container offers easy open-and-reclose convenience. Oberto designed the bright red, black, green, yellow and white graphics to boost brand presence by expanding the area available for the brand identity and corporate colors. Improved packaging technology and engineering provides needed package integrity and product safety without over packaging, which in turn offers sustainability benefits. The new canister is expected to appear on the store shelves later this summer.



## Chocolate Prescription provides a daily dose of chocolate without the guilt

So you love chocolate but feel guilty when you eat it? Plano, TX-based Chocolate Prescription has made it possible to eat chocolate every day without the guilt. Studies indicate that eating a moderate amount of dark chocolate each day may improve your health. But what's moderate? Dr.

Mehmet C. Oz (Oprah's medical expert) recommends 1 oz of dark chocolate every day "because it increases the release of dopamine and provides flavanoids, which keep arteries young." Chocolate Prescription is packaged in one-week and four-week "prescriptions" for \$19.99 and \$76.99, respectively, and is available online. **Great Western Industries** ([www.greatwesternindustries.com](http://www.greatwesternindustries.com)) assisted on the box design. A pearlized plastic tray was designed and manufactured by **Duerr Packaging** ([www.duerrpack.com](http://www.duerrpack.com)).

The flowwrap around the individual bars was designed by **Brouse-Whited Creative Packaging** (714/279-6700). The graphics are from **2nd Story Design** ([www.2ndstorydesign.com](http://www.2ndstorydesign.com)).



## A bit of R&R in a can

In this stressful world, you're either looking to pump up or wind down. And while most beverage companies have been creating high-energy drinks lately, there's one functional beverage that helps consumers relax and "chill out." Relax & Revive from Crash Beverages LLC has come to the market in 12-oz Sleek cans from **Rexam** ([www.rexam.com](http://www.rexam.com)). R&R is specifically designed for consumers who want to

let loose from a tough day or just take a break. This innovative beverage mixes energizing B vitamins with destressing herbal ingredients such as valerian root, passion flower and that Thanksgiving turkey favorite, tryptophan, to deliver a new dimension of mental and emotional functionality. It has a naturally decaffeinated herbal tea base and a tasty berry flavor. But the sophisticated looking Sleek can may just



wake them up in stores. Part of a can family that includes 9- and 10.5-oz sizes, the can provides increased pack density said to afford distribution economics, more cans in secondary packaging and brand-building opportunities on retail shelves. Crash worked with Rexam's integrated graphic art and printing plate operation in Elk Grove, IL, to set the color and graphic tolerances for perfect reproduction of the R&R brand on the aluminum cans. R&R is now available in select retail stores in Philadelphia and Los Angeles for \$1.99 per can and online at [www.twistybuzz.com](http://www.twistybuzz.com). Crash plans to add two more flavors and a diet version to its R&R line and expand distribution soon.

Visit our website! [unitpack.com](http://unitpack.com)

**Deliver your sample products or component products effectively.**

The Unit Pack name is synonymous with innovative research and improvements in unit-of-use packaging. Select the perfect size and shape, from 1/2 cc to 90 cc to hold precisely the amount of product desired. Telephone us toll free 877-930-3200 or e-mail [sales@unitpack.com](mailto:sales@unitpack.com) today for a brochure and sales.

**UNIT PACK**  
COMPANY INC.

Unit Pack Company Inc.  
7 Lewis Road, Cedar Grove NJ 07009-1498  
Phone: 973-239-4112 / Fax: 973-239-0429





# new products equipment

## Vivo! Photo-Quality Digital Label Printer

7,500 Labels? By this afternoon? No Problem!



The Vivo! electrophotographic label printer offers photo-quality label printing at high-speed, and is designed for businesses that require moderate or high volume production of photo-quality labels. For printing private label and special version product labels in short-runs, the Vivo! digitally prints labels at a speed of up to 3 linear inches per second in 600 dpi CMYK color. Cost-effective for production quantities up to 15,000 labels per batch. The Vivo! is a toner-based electrophotographic printer, similar to a laser printer, and prints onto paper and synthetic label materials. Printed labels are extremely resistant to fading, abrasion, and moisture.  
**QuickLabel Systems, 877-757-7978.**  
**[www.QuickLabel.com](http://www.QuickLabel.com)**

## Fastest Industrial Color Label Printers



QuickLabel's QLS-8100 Xe, QLS-4100 Xe, QLS-3000 Xe, and QLS-2000 Xe digital color label printers produce color labels faster than any other tabletop printers on the market. These offer the greatest ability to rapidly process and print variable content, where successive labels have totally different text, graphics, and barcodes. Print as fast as 7 linear inches per second in 4 Spot Colors or in CMYK Process Color at 300 dpi resolution onto labels and other rollstock up to 8.3" wide. Use Custom QuickLabel® software or print from other software using the Windows® driver.

**QuickLabel Systems, 877-757-7978.**  
**[www.QuickLabel.com](http://www.QuickLabel.com)**

## Blank Labels & Inks



QuickLabel® manufactures labels, inks, and thermal transfer ribbons for every label printer brand. We have labels in 1000s of shapes and sizes, and dozens of materials and price ranges. We'll drop-ship to your customer or deliver to meet your own needs.  
**QuickLabel Systems, 877-757-7978.**  
**[www.QuickLabel.com](http://www.QuickLabel.com)**

## Barcode Printers with Lifetime Warranty



QuickLabel's Pronto! family of barcode labels printers make it easy to print single-color product labels and shipping labels. Sold with Lifetime Warranty, QuickSwap™ Loan, Repair & Replacement Service, and 24-hour Customer Support.  
**QuickLabel Systems, 877-757-7978.**  
**[www.QuickLabel.com](http://www.QuickLabel.com)**

## Label Printing Services



QuickLabel offers two services: the QuickPrint service, using QuickLabel's short-run label printers with fast turnaround and low minimum order quantities, and the QuickFlex service, using flexographic presses.  
**QuickLabel Systems, 877-757-7978.**  
**[www.QuickLabel.com](http://www.QuickLabel.com)**

# Print Your Labels Out-of-the-Box

**Zeo!**  
Inkjet Digital Color Label Printer



**Hello :-)** Do you have great ideas for custom product labels that your customers will love? An idea for a new product, or a "new look" for the labels on your existing products? Wouldn't it be great to be able to see your new labels printed right away, in the exact quantity you need? The good news is that you can, with the Zeo! inkjet label printer.

You can use the Zeo! to print your own custom labels in minutes – right out-of-the-box – in fantastic Zeo-listic Color™. Print as much or as little as you need, whether it's one label or 1,000 labels. Print on any label shape or size. Print 150+ labels an hour!

*The Zeo! is such a reliable printer, it comes with a Lifetime Warranty and QuickSwap replacement service.*

**QUICK LABEL SYSTEMS**

The Labels You Want When You Need Them™

Call us toll-free: 877-757-7978

Visit us: [www.QuickLabel.com](http://www.QuickLabel.com)

Inkjet  
Technology by  
**hp**  
invent



Little label printer, big ideas™ :-)

See us at PACK EXPO Booth #4020



# design trends



**Shrink-sleeve label has sunny appeal**

Bottles of Moisture Burst, a new moisturizer from World SunCare Products Ltd., are rolling out with splashy shrink-sleeve labels from **Ameri-Seal** ([www.ameriseal.com](http://www.ameriseal.com)). The 24-hour daily moisturizer comes in an oval-shaped, 18-oz pump dispensing bottle that narrows on the bottom and top. With the tapering shape, the bottle needed a PETG film sleeve instead of other shrink films because of PETG's high shrink percentage, making it the perfect choice for this kind of application. The film also offers 360-deg graphics, enhancing shelf

appeal. The Moisture Burst sleeve is printed in seven colors in sunny yellows and cool blue hues with a sunburst pattern emanating from the center. Ameri-Seal shrinks the wraparound sleeves directly onto the bottles at its Contract Sleeving Div. in Chatsworth, CA.

TECHNOLOGY...SERVICE...RELIABILITY

You Have An **Alternative...**



## Stull, The Choice For Closure Innovation

THE PREFERENCE IS CLEAR:

- Specializing in custom, proprietary and stock closures
- Advanced design/development capabilities for innovative solutions for enhanced product appeal
- State-of-the-art technology – including stack molds, rotating cube mold technology, in-mold assembly, advanced automation, and more...
- Solutions for the food, HBA & personal care, home care, household chemical, pharmaceutical and specialty products markets
- A third generation family business that prides itself on its ability to react fast and provide flexibility to our clients

Our rich and extensive history of success is evidenced by the unique and ground-breaking closures we've brought to market.

Visit our website at  
[www.stulltech.com](http://www.stulltech.com)

**STULL**  
TECHNOLOGIES

17 Veronica Avenue  
Somerset, New Jersey 08873  
(732)873-5000



## Flip-top package takes the mini cake

An innovative paperboard package is helping Premier Foods take a bite out of a new mini cake market segment, with the launch of Mr Kipling Cake Bites, bite-sized, individually wrapped sponge cakes. Premier Foods chose a flip-top Sono-wrap® package from **Sonoco** ([www.sonoco.com](http://www.sonoco.com)) for the tiny cakes, 15 of which come in each package. Shaped like cakes themselves, each of the containers is offset-printed in six colors, designed and produced by Sonoco. Introduced in June, the Cake Bites are available in Strawberry & Vanilla, Lemon and Caramel flavors. Premier Foods requested that the cake package specifically fit a two-high retail shelf display and run efficiently through its new filling equipment. The Sono-wrap for Premier Foods is market-differentiated as a single-wrap version in a completely new size for this application, Sonoco says. "We are delighted with Sonoco's total packaging solution," notes Rachel Pirt, senior brand manager, Mr Kipling Innovation, at Premier Foods. "The vibrant, flip-top cans really help the brand break through what consumers call 'the wall of cake' in stores." The containers and their bases list ingredients and nutritional information.



CHEP -  
PRESERVING THE ENVIRONMENT  
AND YOUR BUSINESS.  
ONE PALLET AT A TIME.



With the help of its customers, in one year alone CHEP was able to save 8 trillion\* BTU's of energy. To see just how, and to calculate how CHEP can enhance your revenue stream and environmental profile, visit [CHEP.com/onepallet](http://CHEP.com/onepallet).

© 2008, CHEPUSA. All Rights Reserved. \*Study by Franklin Associates. Based on 2007 total CHEP network volume versus one-way whitewood.



# comment

John Kalkowski, Editorial Director

## New OEM automation study adds market context



If three people were to look at an object from different angles, they'd all have a different perspective. Of course, what they'd see would be correct, but they might miss some nuance afforded by the others' perspectives.

With the second of three planned reports on the 2008 Automation in Packaging Benchmark study by *Packaging Digest* and *Control Engineering*, we expand your perspective by giving you information about how the packaging equipment suppliers view the market. The full results of the just-completed second phase of the study are available at [www.packagingdigest.com/automationresearch](http://www.packagingdigest.com/automationresearch).

It's not surprising that OEMs see the packaging market in ways both similar and distinct from the packagers themselves. Automation is important to the packaging process, its use is growing and it can help U.S. packagers stay competitive. However, as the reports demonstrate, there are differences in how the two groups view automation benefits and future needs. Interest in the automation studies remains high. This survey of packaging equipment suppliers, conducted in June, drew 198 responses, a significant number considering there are an estimated 660 packaging OEMs in the U.S.

The OEMs have a challenging role because they must

interpret the needs of packagers and, at the same time, they wield considerable influence over the direction of machine innovation.

More than 1,000 packagers added comments on their expectations of the OEMs and how they are performing. Especially interesting are verbatim suggestions from packagers on how the OEMs can improve their products and services.

The third phase of the study, due out late this year, will address the role of systems integrators. It should complete your 360-degree view of packaging equipment, providing you an understanding of the automation market in a full context not previously available anywhere else.

Bernie Abrams, a longtime *Packaging Digest* editor, died July 12. Bernie was well-attuned to the aesthetics of packaging, taking particular delight in working with designers. With a nimble twist of words, he could turn the mundane to the magnificent. In more than 30 years of writing for *Packaging Digest*, Bernie penned countless stories that delighted readers. His wit, sonorous voice and skill with words will be sorely missed.



*John Kalkowski*

## Shrink Sleeve That Fits Your Business.

Unlike most companies, at Axon we understand there's a lot more to shrink sleeving and tamper evident banding than just selling a machine. That's why we work with you to make sure your system is both the best value for your dollar and meets your needs - both now and in the future. Axon will be right there with you every step of the way, whether you're starting up a new product or a new business, with unmatched systems, service and support.

Axon Excellence - Designed for today. And tomorrow.



Download our  
**FREE WHITE PAPER**  
"Selecting the Right Heat-Shrink Device"

Another great solution offered by Axon.  
Go to [www.AxonSleeves.com](http://www.AxonSleeves.com) or call  
1-800-598-8601 for more information.

**AXON**  
**STYROTECH**

a division of Pro Mach

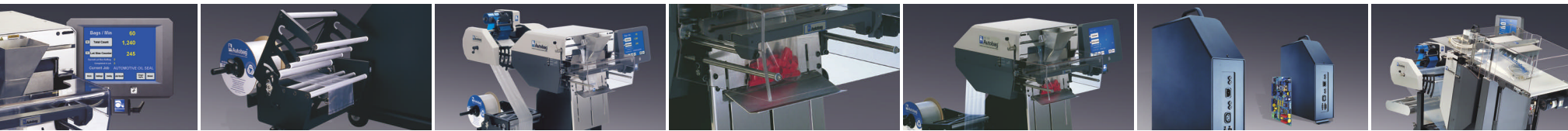






The original bag-on-a-roll packaging materials and systems

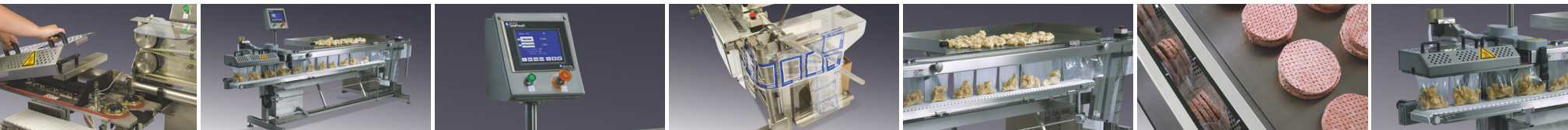
A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



Innovative bagging systems for high-productivity applications



A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



Versatile, benchtop air pillow systems for void-fill and protective packaging

A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



Automatic, high-speed counters



A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



Inline thermal transfer printers, ribbons and labeling software

A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



Premium, system-matched packaging materials, guaranteed-to-run



A PRODUCT OF AUTOMATED PACKAGING SYSTEMS



## The Brands of Automated Packaging Systems

You know us. We've been a pioneer in the packaging industry for more than 40 years. We are the inventors of the original Autobag® bag-on-a-roll materials and bagging systems. Today, we design and manufacture a full line of automated packaging systems, including void-fill systems, infeeds, imprinters and custom engineered solutions to meet the unique requirements of our customers.

### We'd Like to Build a Solution for You

If your product can be packaged in a bag, we'd like to show you how our bagging systems can increase your productivity and reduce your costs. Call us to discuss your application. For bags, bagging systems, and world-class technical support, no other company can deliver the breadth of products and services that we can.

We are Automated Packaging Systems. Call today at **888.288.6224** or visit us on the web at **[www.autobag.com/pd](http://www.autobag.com/pd)**.







**Our films cover your product.  
Our people cover everything else.**

IT ALL STARTS  
WHEN YOU CALL  
KLÖCKNER  
PENTAPLAST.



CUSTOMER SUPPORT TEAM



QUALITY CERTIFICATION



ON-TIME DELIVERY



## KLÖCKNER PENTAPLAST PHARMACEUTICAL FILMS

We've got you covered with a full range of mono and barrier Pentapharm® films for your pharmaceutical blister packaging needs. Our films have been specially formulated to protect against moisture and gas for prolonged product shelf life. With worldwide manufacturing plants and distribution facilities, our global sourcing has you covered no matter where your products are packaged.

Our people keep you covered with their technical expertise and unsurpassed customer service. Every order is certified to meet quality and industry standards. With reliable on-time delivery and continuing technical support after the sale, Klöckner Pentaplast gives you the coverage you need.

Vinyl, PETG, APET, A/MA/B,  
ACLAR®-laminated, PVdC-coated,  
COC-laminated & -coated

ACLAR® is a registered trademark of Honeywell International Inc.

See us at **PACK EXPO Booth #6543**



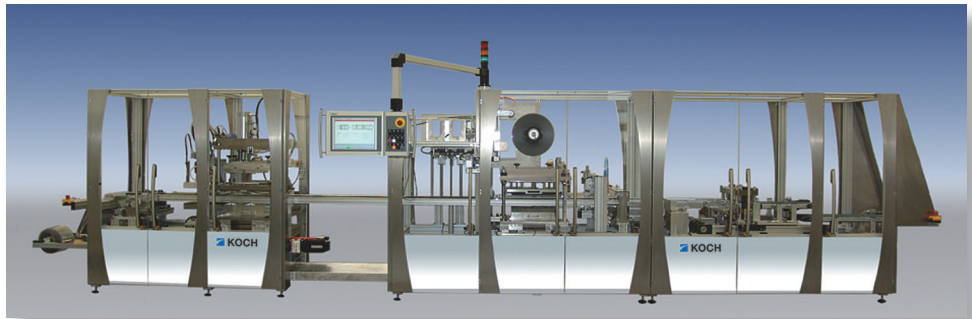
**www.kpfilms.com**  
**540.832.3600**



ON-SITE TECHNICAL SUPPORT

# new products equipment

## Form/Fill/Seal & Bagging



**Form/fill/seal** The KBS-KF form/fill/seal machine is redesigned for large deep-draw blister-packs. With a standard form/seal area of 300x500 mm, the line can produce up to 600 blisters/min. The operator interface has been reworked for more intuitive use, and changeover time is reduced due to the servo-controlled stations, quick-change tools and a gripper chain redesign. A pneumatically clamped material infeed section ensures edge trim is removed and accelerates setup. The co. says that the new design also allows for more rapid acceleration and deceleration.

**KOCH Packaging Systems, LP**, 973/541-7312.  
**www.kochpackaging.com**

**Forklift scale** The Vanguard hydraulic forklift scale reportedly is accurate to within 0.2 percent of the rated load. Hydraulic fluid is directed through a bypass module, where a sensor records roughly 150 pressure values in five sec as the load lowers. The co. says that the resultant average is less prone to error than output from single-pressure reading scales. The system can log weighing events in up to 99 different channels with up to 99 events per channel.

**Keytroller, LLC**, 813/877-4500.  
**www.keytroller.com**

**Bottle LED** LightPad LED devices are designed to illuminate the contents of glass and plastic bottles, particularly in dimmed settings. Roughly 0.142 in. thick, the LED can be glued to the outside of a container base and emit light in multiple colors with patterns and effects. Triggers of activation include a switch, lid removal or an infrared or a radio signal.



**Cognifex**, 206/508-1912.  
**www.cognifex.com**

**Bulk bag unloader** The BFC-F-X bulk bag unloader is designed to eliminate dust during untying, discharging, retying, collapse and removal of bags while still allowing thorough washdown. Its clamp ring forms a dust-tight connection between the clean sides of the bag spout and the equipment. The system is vented to an integral dust collector that vacuums displaced air and dust before collapsing empty bags. To empty the bags completely, bag activators raise and lower the opposite bottom sides of a bag into a steep "V" shape, and a telescoping tube maintains downward tension on the bag as it empties and elongates.

**Flexicon Corp.**, 888/353-9426.  
**www.flexicon.com**



**Gas flusher** The co.'s gas-flush pouch-filling machine can reportedly reduce oxygen levels inside food packaging down to 0.5 percent. The system—operating at up to 60 bags/min—flushes the package before, during and after filling to minimize oxygen captured by the product. Possible bag types are four-side-sealed and standup, both with or without zipper closures. Recommended applications include dried meat products, nuts, coffee beans and grounds, dried fruit, baked goods and dried petfood.

**PTI Packaging Systems**, 800/532-1501.  
**www.ptipacktech.com**





# World Class Labeling Systems Made in the USA

**Every facet...** of our manufacturing process is housed under one roof. We offer the most automated, state-of-the-art manufacturing facility in the industry—resulting in an impeccable finished product.

From Semi-automatic applications to the most demanding high speed, high accuracy labeling solutions, we understand your needs. And at CTM, supporting our customers before, during and after the sale is paramount.



## Front & Back Label Applicator

- Equipped with rugged stainless steel side frames
- Electronically matched top trap ensures optimum system flexibility
- Variable labeling speeds to 300+ Products per minute
- Easily integrates into existing lines or off line configurations

## 3600 RW Series Applicator

- Reads, Encodes, Verifies, Prints & Applies RFID tags
- Unique reject shuttle mechanism for bad tags
- Supports EPC Class 1, Gen 1 and Gen 2 tags
- Sato or Zebra version available

Contact us today, or visit us on the Web!



1318 Quaker Circle • Salem, OH 44460  
Telephone: 330-332-1800 • Fax: 330-332-2144  
[www.ctmlabelingsystems.com](http://www.ctmlabelingsystems.com)

## new products

### Modular food transport

The servo-driven roflo 3 food transfer and distribution system is designed to be flexible and affordable.

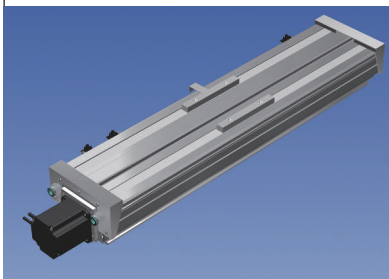
The system's transport pans are each only 3- to 3.5-m long and can be overlapped end-to-end for a variety of designs. They oscillate horizontally—forward slowly and backward quickly—to slide food along gently. A “switcheroo” device automatically separates and tilts the pans to reverse flow at the touch of a button. The pans simply open to discharge the product, so no mechanical gate is needed. The co. says its system's modularity and minimization of moving or complex parts reduces cost and simplifies installation and maintenance.

**tna**, 972/462 6500. [www.tnarobag.com](http://www.tnarobag.com)



### Actuator

The CGL15N/CGL20N Actuator features a corrosion-resistant design for clean-room environments. A seal mechanism and full-size cover reduce dust generation, as does AFE-CA grease.



The curvature in its synthetic resin cage cradles each ball and separates it from the next one, creating space where grease is retained for

lubrication. The actuator is compliant with ISO 14644-1 Class 4 at 2,000 mm/s.

**THK America, Inc.**, 847/310-1111.  
[www.thk.com](http://www.thk.com)

### Air valve

Two new models in the L-O-X valve series feature smaller port sizes— $\frac{1}{4}$  and  $\frac{3}{8}$  in.—for wider machine compatibility. The valve shuts off airflow and exhausts downstream air in equipment being serviced. It is said to meet four requirements found in some industry standards: ease of operation, with a simple push or pull; the ability to lock only in the “off” or blocking position; a full-sized exhaust port for rapid effect; and a means of verifying the removal of downstream air. The valve is designed to have equal pressure on both sides of the spool for reduced operator strain.



**Ross Controls**, 248/764-1800.  
[www.rosscontrols.com](http://www.rosscontrols.com)

### Adjustable levers

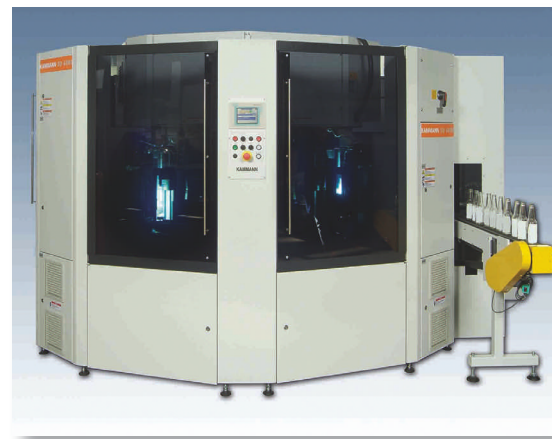
GN 300.4 zinc die-cast adjustable levers are produced with a clamping area that is linked via a thrust pad to a bearing and a screw. The design is said to double the clamping force by reducing friction. Zero movement on the contact area between the lever and the component greatly reduces any marking. The lever handles are available in a matte black pebbled finish or in colors including orange, red, gray, chrome-plated, silver and uncoated.

**J.W. Winco, Inc.**, 800/877-8351.  
[www.jwwinco.com](http://www.jwwinco.com)

### Glass printer

The SD6000 UV screen printer outputs directly onto glass at up to 100 articles/min in six-color or 200 articles/min in three-color. It handles cylindrical and slightly conical shapes and typically bottles. The transport system features central adjustment for different article lengths. According to the co., the SD6000 is a key part of its role in the recently formed Hartness-Inks group, which markets a proprietary ink for decorating and labeling glass.

**Kammann Machines Inc.**, 630/513-8091.  
[www.kammannmachines.com](http://www.kammannmachines.com)



### Ethernet PLCs

The BC9120, BC9020 and BC9050 Ethernet PLCs can be operated either as standalone or as a decentralized intelligence in an Ethernet network. The BC9050 controller features compact housing, and both the BC9020 and BC9120 offer more memory. The BC9120 also has two Ethernet ports that act as a two-channel switch, allowing its I/O stations to be configured with a line topology instead of the traditional star topology, which can reduce wiring labor and cabling costs.

**Beckhoff Automation LLC**, 952/890-0000.  
[www.beckhoffautomation.com](http://www.beckhoffautomation.com)







**SPDT switch** The MASW-007921 SPDT switch is designed for high linearity and a rapid settling time. According to the co., it settles to more than 99 percent of its final value within 10 uS, versus 100 uS to 200 uS for similar switches. The initial compression point—40 dBm at 3v—is said to be well-suited for complex modulations. Recommended applications include CDMA handsets where multiple transceiver or GPS functions are connected to a common antenna.

**Tyco Electronics M/A-COM**, 800/368-3277.  
[www.macom.com](http://www.macom.com)

**Camera** The TroubleShooter LE camera line adds a 1,000-fps model to the 250- and 500-

fps offerings introduced last year. The hand-held digital video camera is designed for production and packaging line troubleshooting and machinery diagnostics.

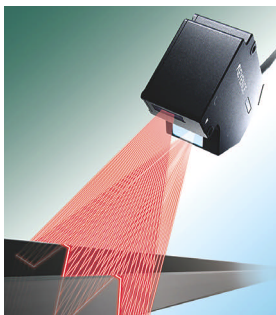
Users can play back images on the built-in screen or download to a Compact Flash card or computer.

**Fastec Imaging**, 858/592-2342.  
[www.fastecimaging.com](http://www.fastecimaging.com)

### Laser sensor

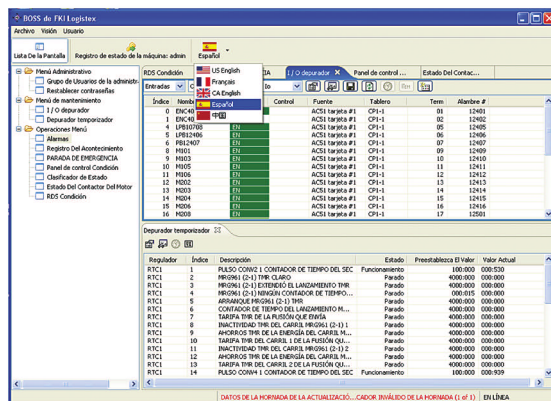
LJ-G Series 2D laser displacement sensors measure the surface profile of targets in the X and Z directions. Said by the co. to be the fastest in its class with 3.8-ms sampling, the LJ-G is reportedly accurate to  $\pm 0.1\%$  F.S. in the Z-axis and can perform 8-point measurements. Its E3-CMOS image sensor provides stability. Five sensor-head types ranging from 15 mm to 200 mm can handle tight specifications for a wide range of applications. The all-in-one controller allows easy setup on screen or with the optional Navigator software.

**Keyence Corp.**, 888/539-3623.  
[www.measurecentral.com](http://www.measurecentral.com)



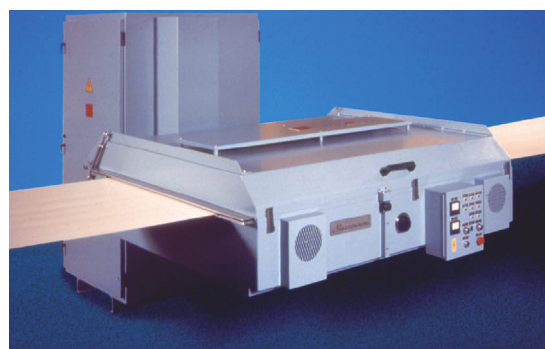
**Motors** 8LT Series three-phase synchronous motors reportedly feature excellent dynamic properties and positioning precision to handle demanding applications. Available in two sizes, the motors are rated with a power of 0.11 to 21 kw and a stall torque of 50 to 900 nm. According to the co., the short, compact design eliminates the need for angular gears in many cases. An embedded parameter chip allows device data such as a serial number, type and manufacturer data to be read and registered electronically, without component removal. Self- and external cooling are optional.

**B&R Industrial Automation Corp.**,  
770/772-0400. [www.br-automation.com](http://www.br-automation.com)



**Software** The BOSS® PC-based control software for material handling automation now features a multilingual user interface. Supported languages include U.S. and U.K. English, German, Spanish, French, Chinese, Japanese and Korean. The interface automatically accounts for language-specific variables, such as units of measurement and date, time and numeric formats. The BOSS software performs machine control, data collection, system diagnostics, host integration and material flow management.

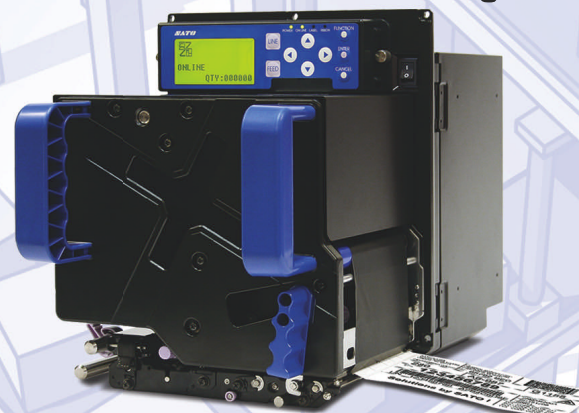
**FKI Logistex**, 513/881-5239.  
[www.fkilogistex.com](http://www.fkilogistex.com)



**Web dryer** The Macrowave RF drying system selectively heats only the patterned coatings on the web and leaves the bound moisture in the substrate intact, which helps prevent over drying, distortion and shrinking. Compared to typical hot-air and IR dryers, this 1,500-ft/min system reportedly needs  $1/3$  to  $1/5$  the floorspace, permits lower web temperatures and offers up to 80 percent energy savings. Makeready is accelerated with the RF's instant power. The dryer handles webs up to 120 in. wide and meets OSHA safety regulations and FCC standards on communication non-interference.

**Radio Frequency Co., Inc.**, 508/376-9555.  
[www.radiofrequency.com](http://www.radiofrequency.com)

# Fast. Flexible. Friendly.



SATO's new S84 print engines have everything you need to get the job done right – right away.

SATO's new S84 print engines have raised the bar on the competition again. The industry's best-performing print engines for automated print apply systems are now more productive and easier to use than ever. A host of exclusive benefits make the S84 unbeatable, including:

- **Powerfully Productive** – with a max print speed of 16 ips, a 32-bit high-speed processor, a 1,000 meter ribbon capacity and a quick-change ribbon cassette option, the S84 allows you to print more with less downtime.
- **Completely Compatible** – the S84 allows application flexibility within a single print engine architecture and can print in 203, 305 or 609 dpi thanks to interchangeable print heads.
- **Intuitive Interface & Simple Service** – the only thing easier than operating the S84 is servicing it. The large, easy-to-read LCD with icon-based user menus allows for easy operation. Quick-change replacement parts swap out in a snap and are common among all three models.

See for yourself why the S84 series from SATO is the industry's best – bar none. For more information, call your local reseller today or log on to [www.satoamerica.com/S84](http://www.satoamerica.com/S84) to download a S84 datasheet.





# new products equipment

**X-ray inspection** The Eagle QuadView glass-in-glass x-ray-inspection system uses four separate angles to ensure coverage even in the bottom and crown of a rigid container. Its design reportedly produces fewer false rejects, minimizing wasted product. The system—which operates at up to 400 ft/min—is said to be particularly ideal for detecting glass contaminants in glass containers. Optional features include a conveyor and multiple reject stations that can be linked to an inspection routine.

**Smiths Detection**, 877/379-1670.

[www.smithsdetection.com](http://www.smithsdetection.com)



## poly pack inc.

### Shrink Wrap Machines



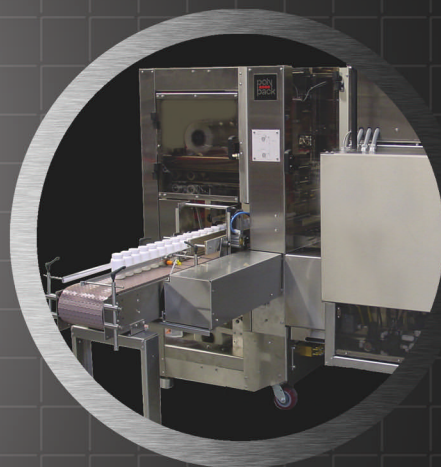
# THINK COST

# THINK GREEN



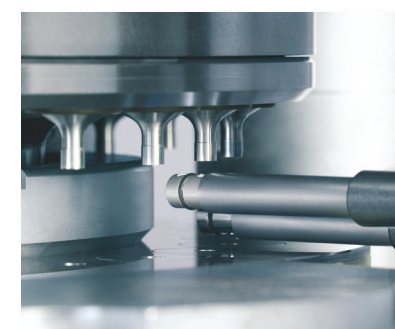
# THINK SHRINK!

[www.POLYPACK.com](http://www.POLYPACK.com)  
727.578.5000



**Carton sorter** The CASI SortMaster 130 HS pusher/sorter rejects cartons up to 75 lb from any conveyor. Cartons up to 36-in. long and between 12- and 36-in. wide can be sorted. The 130 HS runs at up to 60 cartons/min and is said to be ideal for applications where space is limited and users want to avoid cutting existing conveyor.

**Cornerstone Automation Systems Inc.**, 800/401-0304.  
[www.cornerstoneautosys.com](http://www.cornerstoneautosys.com)



**Spray gun** The Manesty AccuSpray™ spray system coats pharmaceutical tablets with magnesium stearate to prevent them from sticking to compression machines. AccuSpray™ is said to lower the amount of magnesium stearate used from a typical average of 100 g/hr to as low as 4 g/hr at full production speed, cutting supply costs. The reduction also reportedly produces tablets with greater purity and decreases the force required to eject the tablets from the compression machine for less wear and tear.

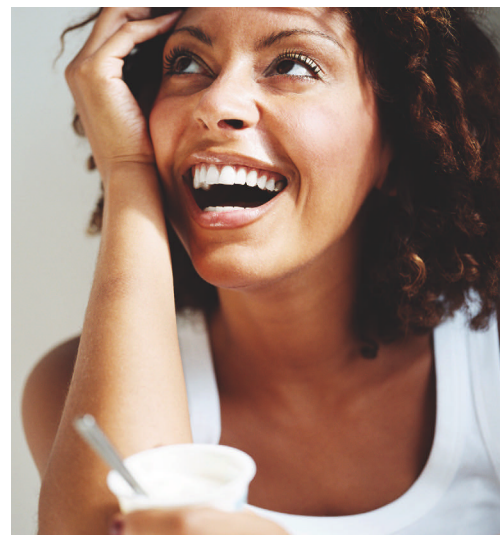
**OYSTAR USA**, 973/227-5575.  
[www.oystarusa.com](http://www.oystarusa.com)



# INSPIRED SOLUTIONS

At Alcan Packaging Food Americas, our customers are our No. 1 priority.

We have a passion for packaging and we are dedicated to doing all the right things for you. Our talents are focused on manufacturing excellence, sustainability and innovation — producing high-performing, high-quality, convenient food packaging products. Because of you, we are inspired to create industry-leading solutions for a dynamic market.



**Talk to your Alcan Packaging Food Americas representative at  
1-773-399-8000 or visit [www.alcanpackaging.com](http://www.alcanpackaging.com)**

**ALCAN PACKAGING**  
FOOD AMERICAS





**45,000**  
OF YOUR PEERS

**10,000+**  
INNOVATIVE SOLUTIONS

**2,000**  
EXHIBITORS

**1**

PLACE FOR YOU TO SEE IT ALL  
**PACK EXPO INTERNATIONAL**

Register today at [www.packexpo.com](http://www.packexpo.com)



**November 9-13, 2008**  
McCormick Place | Chicago, IL | USA



© 2008 PMMI



# new products materials

## Rigid Containers



**Coated PET bottle** A 750-mL size inside-coated PET wine bottle is available. The Plasmax coating layer, described as an ultra-thin, crystal clear, impermeable and completely nonreactive silica (SiOx), is already in use with the co.'s 187-mL wine bottle. Reportedly not affecting the bottle's recyclability, the coating, its mfr. says, maintains the appearance, taste and shelf life of wine while preventing oxygen permeation and any carbon dioxide loss.

**Ball Corp.**, 800/428-7145.  
[www.ball.com](http://www.ball.com)



**DIY bottle** Deco-Mates™ zooms in as a decorate-it-yourself package for children. The blow-molded HDPE bottle is supplied with a full-color decal sheet and more than 45 different labels, the co. says, which show off an astronaut configuration for a licensed Space Center brand. Suggested applications of the concept include a broad range of bath, shower and other personal care products in additional character shapes and themes.

**Cosmicare Design & Mfg.**, 888/300-1695.  
[www.cosmicare.com](http://www.cosmicare.com)

**PET bottles** Tulipa is a new PET bottle that the co. says works equally well upright or inverted. In 250- and 500-mL sizes, the bottle comes with



three different snap-on closure styles, two available with silicone or TPE dispensing valves. The patented, bi-injection molding of the valves results in a more cost-effective valve dispensing system

compared to traditional methods, the co. explains.

**TricorBraun**, 800/325-7782.  
[www.tricorbraun.com](http://www.tricorbraun.com)

**Air-powered aerosol** Anticipating the California Air Resources Board's directives mandating reduced VOCs by 2010, the EarthSafe™ dispensing system is available, reportedly replacing hydrocarbons with compressed air as the propellant, in an aerosol can. The codeveloped system is also said to offer advanced valve technology, enabling total product evacuation at consistent flow rates while using fewer moving parts, increasing package reliability. Initially produced in a 202-dia size and in 306, 509, 605 and 700 heights, the can is also recyclable, the co. says. The technology is expected to be commercial in 2009.

**Crown Holdings, Inc.**, 215/698-5260.

[www.crowncork.com](http://www.crowncork.com)

**Ultramotive Corp.**, 802/234-9901.

[www.ultramotive.com](http://www.ultramotive.com)



**Pharmaceuticals carton** Suitable for pharmaceuticals, a carton called CR- and senior-friendly makes its North American debut aimed at high-volume, branded and generic drugs. Reportedly available in a variety of sizes and versions, Pharma DDS is offered with an integral unique locking mechanism making it convenient and easy for patients to use, with the co. claiming the structure has reached the highest F=1 result in CR testing.



**Cadmus—The Whitehall Group**,

704/583-6561.

[www.cadmuswhitehall.com](http://www.cadmuswhitehall.com)

**Stora Enso Sales North America**,

203/359-5797.

[www.storaenso.com/na](http://www.storaenso.com/na)

**Inflatable cushioning** AirSpeed™ 9000 inflatable cushioning for secondary packaging is made from an LDPE/nylon coextrusion. The cushioning features a series of adjoining air tubes connected by patented one-way valves. The tubes are inflated via an external valve to cushion and protect products in shipment. The product may be placed in a deflated package, which is then inflated, with air travelling through a sequence of the chambers. The transparent tubes reportedly remain inflated even if one is punctured. The cushioning requires significantly less space than EPS, molded pulp or other cushioning, the co. reports.

**Pregis Corp.**, 866/692-6163. [www.pregis.com](http://www.pregis.com)



## PLA color concentrates

Three color concentrates using PLA or polyester carriers focus on bottles, film, sheet, profiles and injection-molded items made with PLA, with the co. citing a large range of colors available. Offered are PLA-carrier concentrates for all biodegradable applications; biodegradable copolyester-carrier concentrates with petrochemical resin for biodegradable blown films requiring greater flexibility and PETek® PET-carrier concentrates for non-degradable applications with biopolymer base resin.

**Teknor Color Co.**, 401/725-8000.

[www.teknorcolor.com](http://www.teknorcolor.com)





# How does a packaging products company become a builder of brands?



Packaging shapes the way consumers experience brands. So we've developed the world's most integrated packaging platform, uniting product development, design, research, materials engineering and process management with paperboard mills, converting- and prepress-facilities and automation centers around the globe.

In doing so, we've transformed our company into a maker of ideas—collaborating with companies to create packaging solutions that are more effective, more efficient and more sustainable.

**MeadWestvaco is MWV.**

INSIGHTS | INNOVATION | DESIGN | MATERIALS | PRIMARY & SECONDARY PACKAGING | SYSTEMS | SUPPORT



# new products materials

**Self-sealing actuator** A patented, self-sealing actuator reportedly relies on an automatic sealing membrane in the pump orifice that prevents products



from making contact with air, reducing risk of contamination while eliminating discoloration and drying at the orifice. The all-plastic, self-priming system is said to operate in any position, and is available in a wide range of formats, round or oval-shaped,

with dosage options of 0.5, 0.8, 1 and 1.5 mL with sizes from 30 to 200 mL.

**Megaplast GmbH & Co.**, 732/578-9100.  
[www.megaplast.de](http://www.megaplast.de)



**Wine closure** A marketing campaign launched by the co. to show consumer preferences for its wine bottle closure via video is available on youtube and other website locations. Requiring no tools to open, the structure consists of an outer TE cap, an inner foil oxygen barrier and a plunger that pops like a cork when extracted and, the co. claims, is easily reinserted.

**ZORK USA**,  
866/996-9675.  
[www.zorkusa.com](http://www.zorkusa.com)



**Blister films** Now made at the co.'s domestic headquarters facility are PVdC-coated PVC blister films for contract packagers and multi-national pharmaceutical customers. Said to meet all regulatory requirements, the films offer good thermoformability, excellent low- to medium moisture and oxygen barriers and high transparency for improved package appearance. The films are available with coatings at 40 g/sm, in duplex and triplex constructions.

**Tekni-Films**, 908/722-4800.  
[www.tekni-films.com](http://www.tekni-films.com)



**Mouthwash bottle** Molded of PET, a 16-oz mouthwash bottle with a 28/415 neck finish is introduced for healthcare liquid applications including cough medications and rinses plus beverages. The ergonomic design of the neck facilitates pouring, and the bottle is lightweight and highly transparent, the co. reports, and offers maximum space for a strong label presence.

**O. Berk Co.**, 800/631-7392.  
[www.oberk.com](http://www.oberk.com)

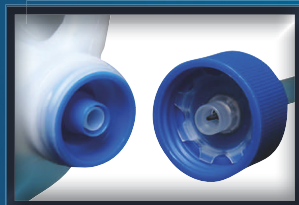
## HAVE YOU MADE THE CONNECTION?

The only closed-loop design that provides a safe and economical system for containment and dispensing of concentrated chemical.

Increase end-user safety  
Prevent toxic spills  
Eliminate mixing mistakes

**RD  
INDUSTRIES**

Protect the environment  
Optimize product performance



**CONNECT with us to find out more!**

7417 North 101 Street  
Omaha, Nebraska 68122  
[www.rdindustries.com](http://www.rdindustries.com)

**SAFFLO**  
MAKE THE CONNECTION

800-759-7090  
402-455-8553  
[sales@rdindustries.com](mailto:sales@rdindustries.com)

Does your label supplier leave you feeling like a small fish in a big pond?



Over 130 Years Treating Customers Like **Gold!**

**In-house Design & Prepress**  
**Optimyser™ 7-Color Printing & Label Management**  
**Promotional Label Application**  
**Point-of-purchase Displays**  
**Next Generation Production Equipment**

Family-owned provider of pressure-sensitive, shrink-sleeve, cut-and-stack paper and film, in-mold, and package-promotional labels - with a personal touch - since 1877

Be a big fish in our pond!



**800/473-3464**  
[www.smythco.com](http://www.smythco.com)



## A. Schulman Provides a Clear Choice for Ionomer Resins

A.Schulman, a leading international supplier of high-performance plastic compounds and resins, has introduced Clarix®, a new class of ionomer thermo-plastic resins. The Clarix® product can be used to improve sealing, adhesion, flexibility, toughness or blend compatibility properties, and help provide solutions to product requirements.

Clarix® resins offer superior performance in clarity, seal and directional tear properties



for the packaging industry. Excellent chemical and puncture resistance gives added benefits to packaging requirements. Clarix® resins will readily bond to foil, textiles and paper substrates. Additives, such as UV inhibitors, release and slip agents, can be incorporated to help solve packaging challenges and improve performance. Clarix grades can include the benefit of low oxygen and air permeability performance.

Clarix® resins adhere to many different mediums including wood, fabric, metal and glass. Offering a protective coating with great scratch and mar resistance, it also can include high ultraviolet-radiation exposure tolerances. Clarix® resins can be used to coat wood, allowing the natural look of wood to come through while protecting its finish from damaging scratches. As a powder coating applied to metal, its toughness and inherent metal adhesive properties allow it to provide a long lasting and durable

finish. Clarix can also be used to modify Polypropylene, Polyethylene, Polyamides, Polyurethanes and Polyesters for improved scratch resist-

ance and flexibility.

Clarix® is ideal for clear, tinted or special effect molding applications and A. Schulman has an exten-

sive line of metallic and special effect color concentrates that can be used to enhance the visual appeal of a molded part.

From bowling pins to textile coating, there is no limit to what Clarix® resins can add to product applications.

## "We're Always Thinking Outside the Box" When We Develop Additives for Your Film and Packaging Solutions.

Your application determines what's in each box of additive masterbatches and color concentrates from A.Schulman.

Save time and money using a single source for additives and color. It's a wrap with A.Schulman covering your industry needs, from agricultural and industrial to medical and food & packaging applications.

When you need film additives and color concentrates, call or visit our web site for solutions.



### A. SCHULMAN

#### Engineered Plastics

- Polyvinyl Fluoride Thermoplastic PVC Compounds
- Suprene PVC-Based Thermoplastic Elastomers
- Sunflex Low-Grain PVC Thermoplastic Elastomers
- Vulcan High-Quality PVC Compounds
- Polypropylene TPO (Thermoplastic Olefin) Compounds
- Schulamid Filled and Unfilled Nylon Compounds
- Schuladur Filled and Unfilled Thermoplastic Polyester Compounds
- Schulblend Nylon66 Alloys
- Farnite Formulated Ionomer Compounds
- Clarix Thermoplastic Ionomer Resins
- Dartac Polypropylene, Polyethylene, EVA Compounds
- Polyfilm Flame-Retarded Thermoplastic Compounds and Concentrates
- Invision UV Stabilizers for Bulk Resin TPEs and Engineered Applications

#### Masterbatches

- Additives for Film
- Color Concentrates
- White Concentrates
- Black Concentrates
- Papermatch

#### Distribution

- Polypropylene
- Polyethylene
- Epoxy Resin
- Relational Molding Resins

ANTIBLOCK  
ANTISTATIC  
BOPP  
MINERAL FILLED  
FOAMING  
BARRIER  
SLIP  
ANTIBACTERIAL  
ANTIFOG  
UV STABILIZERS



**A. Schulman**  
COMPOUNDING YOUR IMAGINATION™

3550 West Market Street | Akron, Ohio 44333  
800 54 RESIN | [www.aschulman.com](http://www.aschulman.com) | [info@aschulman.com](mailto:info@aschulman.com)

PROCESSES: BOPP / OPP BLOWN CAST MOLDING SHEET



# Penning an injectables partnership

Eli Lilly's plant near Strasbourg will produce the glass cartridge filled with insulin and inserted into the pen.

The result of several years' collaboration, Eli Lilly Laboratories and Rexam form a partnership in France for the production of **A NEW INSULIN INJECTION PEN.**

**Lauren R. Hartman**, Senior Editor

With an estimated 246 million diabetic patients in the world, and incidence of the disease mounting constantly, a new insulin injection pen for the treatment of diabetes is about to go into production in France, to be made and marketed by the Eli Lilly and Co. Group and handled by **Rexam Pharma** ([www.rexam.com](http://www.rexam.com)). Rexam's La Verpillière plant in Isère, France, which specializes in drug-delivery

**Equipment validation will take place to provide diabetic users with "perfect reproducibility of the injected doses."**

systems such as asthma inhalers and injection devices, was inaugurated on June 18 for construction of an expansion for the pen project.

Eli Lilly and Rexam are both investing in their French manufacturing facilities in order to produce the pen. The result of several years' of collaboration between Rexam Pharma and the Eli Lilly and Co. Group, the insulin injection pen partnership is expected to go onstream in 2009.

Incorporating more than a dozen plastic parts and a metal spring, the new insulin injection pen will feature two sections: one has a dose-selection

mechanism and the other forms a protective cap. The two pen sections will be produced at the La Verpillière site, while Lilly's Fegersheim site in Alsace near Strasbourg will produce a glass cartridge filled with insulin that will be inserted into the pen. The new pen will be marketed worldwide.

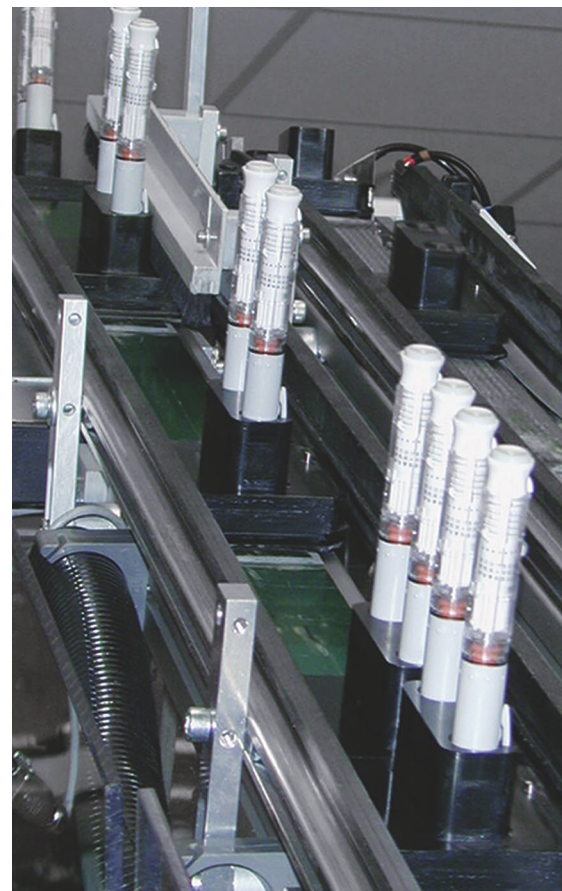
Lilly's Fegersheim site, which specializes in injectables, is the company's biggest industrial production site in the world, with production for insulin, parathyroid hormone and growth hormones.

The Fegersheim plant will also assemble the pen sections around the glass cartridge of medicine during the device's final assembly process.

To produce the pen section components, Rexam will equip

it plant with dedicated **Staubli** ([www.staubli.com](http://www.staubli.com)) robotic systems, injection presses, marking machines and an assembly line with ultrasonic welding, sticking and packaging technology. Each phase of the process will be camera-monitored, Rexam says. About 3,800 sq m of the La Verpillière building will be devoted to manufacturing the product to meet global demand.

Designed to be produced by multiple molds on injection presses at La Verpillière, the plastic parts will be made of materials chosen specifically by the



The new insulin injection pen will be marketed worldwide. Two pen sections will be produced by Rexam.

## FDA approves a form of nano ink technology to fight counterfeiting

The Food and Drug Administration has approved the use of brand-protection technology from **Nanolnk's NanoGuardian Div.** ([www.nanoguardian.net](http://www.nanoguardian.net)) on an un-named client's products, NanoGuardian announced in June. NanoGuardian says that it focuses exclusively on delivering brand-protection solutions to fight illegal diversion and counterfeiting.

Reported in a recent *Drug Store News* eletter,

the technology, called NanoEncryption, uses nanolithographic encryption to covertly imprint information directly onto tablets, capsules and vials. NanoGuardian says the information includes dosage strength, expiration date, manufacturing information and the targeted site of distribution.

"This novel technology is virtually impossible to copy and creates an impenetrable barrier to reverse

engineering by counterfeiters," says Nanolnk chief executive officer James Hussey.

The World Health Organization estimates that \$55 billion worth of counterfeit and diverted pharmaceutical products enter the supply chain yearly. Nanolnk estimates that pharmaceutical companies lose \$180 million/yr to counterfeiting and diversion. Nanolnk launched NanoGuardian in May.



Ink Jet.  
Laser.  
Thermal Transfer.  
Labelers.  
Track & Trace.  
Supplies.  
Parts & Service.

What does world-class  
uptime look like to you?



*Count on Videojet to deliver it.*

It's time to change the way you see productivity. Videojet® printers offer a complete range of marking and coding solutions — giving you the peace of mind you've been looking for. Our best-in-class printers are engineered to deliver longer uptime between regular maintenance. Higher-quality marks for any substrate or application. More efficient use of consumables. And features that require less operator interaction. With the industry's largest, most responsive service network, you can count on dependable support. It's time to realize your potential and see what world-class uptime looks like. Visit [www.videojet.com](http://www.videojet.com) or call **866-871-3226**.





Lilly group according to the particulars of the end use of the device.

Before the pens can be brought to marketable production, equipment validation will take place to provide diabetic patients who use the pen with what Lilly calls "perfect reproducibility of the injected doses."

Laurence Quesdeville, Rexam's communications spokesperson in France, tells PD that Rexam is investing 7 million

Eil Lilly's Fegersheim site, which specializes in injectables, is the company's biggest industrial production site in the world.

euros in equipment for the project at the La Verpillière plant. The facility specializes in drug-administration systems, such as inhalers for asthma and injectable devices.

"The objective is to set up and validate the industrial equipment in hopes of starting production in 2009," Quesdeville explains.



# Picture Perfect Labeling



For over 30 years LSI has been an industry leader through superior engineering resulting in continued reliability. Our Model 1500 with Three Point Wrap Station is a perfect illustration why.

Engineered to deliver unmatched reliability day in and day out, the Three Point Wrap Station employs an innovative roller configuration that enables the labeler to control the orientation of the product for "picture perfect" label placement. Like all of our labeling systems, the Three Point Wrap Station can be customized to fit your labeling application. Add components that meet or exceed operating parameters and factory testing using your products and labels and you've got maximum uptime and lower operating costs — and that's picture perfect labeling every time.

For exposure to the complete line of LSI Labelers call 201.405.0767 or visit [www.labelingsystems.com](http://www.labelingsystems.com)

**LSI**<sup>®</sup>  
**Labeling Systems Inc.**  
32 Spruce Street • Oakland, NJ 07436  
a division of Pro Mach



Pen production will be handled by a fleet of robotic systems similar to one of Rexam's existing robots.

Rexam says its facility adheres to Good Manufacturing Practices (GMP) in compliance with pharmaceutical industry requirements that apply to both the actual medicine and its container.

Lilly's most important production site at Fegersheim is transforming an existing 600 sq m and investing about 35 million euros in new production methods, the first of which will be delivered in the second half of 2008.

After Rexam's acquisition of Precise Technology USA in 2005, it established a relationship between Rexam Pharma at La Verpillière and Lilly Laboratories' production site at Fegersheim. Rexam says it is demonstrating the capacity to manage such a large-scale industrial project, and Lilly is bolstering its supplier portfolio for plastic parts, entrusting the production of the pen parts to Rexam.

Special project teams at both companies are making the long-term cooperation possible. The partnership is expected to create approximately 50 jobs at the La Verpillière plant in the long run, Rexam reports.

**More information is available:**

Rexam Pharma (U.S.), 847-541-9700.  
[www.rexam.com](http://www.rexam.com).

Staubli Corp., 864/433-1980.  
[www.staubli.com](http://www.staubli.com).





Infinite expertise ...



... endless possibilities

Experience the World of Automation

**exiderdome**

U.S. Tour | July 2008 - May 2009

[www.exiderdome.com/us](http://www.exiderdome.com/us)

## SINAMICS drives

Designing machinery today is like playing chess – one false move and your competition takes the lead. The SINAMICS drive family from Siemens eliminates the risks and puts your applications in control. SINAMICS delivers the widest power range in a single drive family, which translate to harmonized components, standard communications and unified engineering tools. Together this delivers real value with endless possibilities. So, why wait for the competition to make the first move? Contact Siemens industry experts to see the benefits firsthand. SINAMICS Drives from Siemens – **Setting standards with Totally Integrated Automation.** [www.siemens.com/sinamics](http://www.siemens.com/sinamics)

Answers for industry.

**SIEMENS**



## ClearView® Plastic Tubing



Need innovative packaging ideas for your product? Choose Caplugs' ClearView plastic tubing. Made from high-quality PETG or rigid PVC, Caplugs' durable, clear plastic tubing is flexible, yet impact resistant. Available in a variety of diameters and lengths, ClearView tubing has the same clearness as acrylic or glass. To finish off your package, choose from thousands of tube ends, available in an endless variety of sizes, styles, colors and materials. For more information, call 1.888.CAPLUGS or visit [www.caplugs.com](http://www.caplugs.com).

## Customized Parts



Caplugs has taken custom capabilities to the extreme by adding full production lines for die-cutting, printing and part/tool modification. Caplugs can die-cut any shape into any material. Personalize your product by printing your company name, logo or instructions on any part. Choose a standard product and alter it by punching a hole, cutting a slit, and more. For more information, call 1.888.CAPLUGS or visit [www.caplugs.com](http://www.caplugs.com)

## Custom Tools



Caplugs has more than 5,000 catalog parts available for immediate shipment. In addition to catalog parts, the company has thousands of custom tools, along with a large secondary department to alter existing parts. Caplugs has a team of design engineers to take you from design and development to prototyping and production. With full in-house design and tooling capabilities, no time is wasted on outsourcing. For more information, call 1.888.CAPLUGS or visit [www.caplugs.com](http://www.caplugs.com).



[www.caplugs.com](http://www.caplugs.com) • 1-888-CAPLUGS

See us at Pack Expo  
Booth #E-8814  
November 9-13, Chicago, IL

packaging security



# Holograms battle counterfeiting

They can be a **KEY WEAPON** in the pharmaceutical and medical packaging anti-counterfeiting battle. Ian Lancaster, general secretary of the International Hologram Mfrs. Association (IHMA), describes how.

Sophisticated replication techniques have made counterfeiting and fraud a serious threat to the pharmaceutical and medical industry—and to the suppliers to the sector, like packaging companies.

The World Health Organization ([www.who.int](http://www.who.int)) estimates that annual earnings from the global sales of counterfeit and substandard medicines are more than \$32 billion, while counterfeit drugs and packaging put people's lives at risk. Diversion of legitimate product outside authorized distribution channels is another problem.

In response to this problem, many of the world's leading pharmaceutical and medical companies have directed their efforts at authenticating their packaging as part of the process of protecting their products. As a result, diffractive, optically-variable devices—referred to generically as holograms—have become one of the most widely used overt authentication features on pharmaceutical products around the world.

## Caught on quickly

Since Glaxo first used a tamper-evident hologram to seal packages of Zantac in 1989, holograms have been utilized in a big way by the pharma/medical industry. Many major drug companies use holograms on at least some of their medicines in selected markets, and they are used in the form of labels, seals, hot-stamped patches and blister-pack foils.

The ability of a hologram to provide effective protection lies in the continuous innovation, invention and evolution in holographic techniques

that have succeeded in creating increasingly complex devices that are easily recognized yet difficult to copy accurately.

The evolving role of the hologram also has been accompanied by the increased use of the security device in combination with other authentication technologies. In such solutions, holograms often provide overt first-line authentication while covert features such as scrambled images, micro-text and UV-sensitive or other specialty inks provide second-line authentication for trained examiners equipped with appropriate decoding equipment.

## Track and trace

Another trend has seen the serialization of holograms as part of systems that combine authentication with traceability. So-called track-and-trace systems link on-pack security devices with database management and field-tracking services.

In this way, the ability to know where a pharmaceuticals consignment has been, where it is now and where it is heading has become a fundamental part of many drugs companies' production and logistical operations. This is particularly important where the ability to identify the source and provenance of products is becoming a mandatory requirement, as it is in the U.S. with the Food and Drug Administration's and some state requirements for pedigree.

While the U.S. Congress is currently considering making the use of security marking on some pharmaceutical products mandatory using "overt, optically variable counterfeit-resistant technologies"



to protect consumers from fakes, the hologram is already specified as the authentication feature on the world's only statutory pharmaceutical marking scheme—the Meditag program in Malaysia.

### Uniquely-numbered holograms

This initiative requires all registered medicines, over-the-counter (OTC) pharmaceuticals and traditional medicines to carry a uniquely numbered label built around a hologram. The system is supervised by a central authority that controls the issue of tags and trains inspectors to examine holograms through the distribution chain.

Since its introduction, the system has led to a significant increase in the identification and confiscation of illegal items from the market and prevented their entry into distribution channels. As a result, consumer confidence in the integrity of pharmaceuticals has increased, and public health has been safeguarded. More recently, the National Agency for Food & Drug Administration and Control in Nigeria has also announced that it is planning to introduce uniquely numbered holographic labels to be used on all licensed medicines distributed in that country.

Perhaps unsurprisingly, the success and near ubiquitous use of holograms in anti-counterfeiting applications has inevitably led to attempts to copy or replicate them. But the intrinsic features of holograms mean that the techniques and visual effects make it

very difficult to copy a properly conceived and executed authentication hologram with 100-percent accuracy.

Historically, holograms have succeeded in their job to fight counterfeiting. They have proven to be extremely difficult to copy accurately and invariably. While the product and packaging they protect may have been counterfeited, the lower-quality copy of the hologram has more often than not been the feature that has demonstrated that it is a counterfeit.

In this way, the hologram serves as an effective detection feature, when sophisticated criminals have the resources to reproduce packaging that

## Holograms have proven to be difficult to copy accurately and invariably.

is barely distinguishable from the genuine—the same cannot be said of the fake holograms.

As an example, the situation involving an important anti-malarial treatment called Artesunate, is often quoted. More than half of the sales of this drug in Southeast Asia are reportedly of fake product, despite the fact that its blister-pack incorporates a hologram.

What can be seen here is that, despite the fact that the hologram used is relatively simple and has been unchanged for several years, the fake holograms are identifiable as such.

Continued on page 32

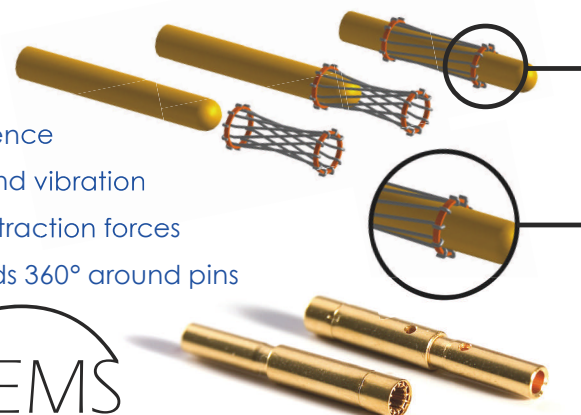


## Your problems are not your FAULT.

(It's your equipment.)

Tired of common E19/E20 error codes, due to cable failure? With traditional contact system design, failure is inevitable due to CONTINUOUS FREQUENCY VIBRATION, TEMPERATURE CYCLING, ENVIRONMENT FLUCTUATIONS and CORROSION. With a little forward thinking and design, **Amphenol Sine Systems** offers you a better solution... **RockSolid™ Connections**. These NEW hi-reliability feedback cable assemblies are specifically designed to be compatible with most motion control systems.

**RockSolid™**  
Connections



- [-] Worn away Gold-plating (Signal degradation)
- [-] Extraneous contamination (C, Br, Ca, Zn, SiO<sub>2</sub>)
- [-] Limited contact mating surface area

- [+] Longer contact life
- [+] Lower contact resistance
- [+] Immunity to shock and vibration
- [+] Low insertion and extraction forces
- [+] Contact area extends 360° around pins

**Amphenol** | SINESYSTEMS

1.800.394.7732 . E: sine\_info@sineco.com . www.sineco.com

Buy Factory-Direct, Motion Control Cables compatible with

**Allen-Bradley** • **Indramat** • **Siemens** • **Fanuc**

Order online now at **www.sineco.com**



The problem is that in a region of low rural literacy, very high poverty and very poor drug regulation, where medicines are sold in street markets and nonspecialist shops, most buyers and users of Artesunate see a hologram and think that it means that the medicine is genuine.

The overall conclusion should be that the Artesunate case is a classic example of how not to manage a hologram-authentication program on a brand of medicine. The

hologram [for actual Artesunate] has not been redesigned since it was first introduced and insufficient attention was paid to the distribution, examination and purchasing patterns in the region.

In contrast, there are many examples of how holograms continue to provide a successful and vital detection function in pharmaceutical anti-counterfeiting strategies. In all of these cases, it is widely understood by those involved that formal inspection of



the hologram provides the quickest way to identify a fake product, even if this then needs to be supported by forensic examination.

Importantly, as well as understanding the need to invest in the creation of a properly designed secure hologram, those pharmaceutical companies and organizations involved in successful anti-counterfeiting efforts also recognize that it should not be the sole responsibility of the consumer to examine a hologram to check that the product is genuine.

Rather than rely on untrained members of the public to identify counterfeits, it must be the primary responsibility of manufacturers and the enforcement agencies to ensure that fake pharmaceuticals not be able to enter the legitimate supply chain in the first place. This is why successful brand protection programs now involve formal examination and inspection systems at different stages in the distribution network.

### Teaming authentication with detection

The holographic industry is working hard to destroy the myth that sophisticated holograms cannot be counterfeited. Anything can be counterfeited; the question is how well it can be counterfeited, and this is where the real value of holograms should be appreciated.

The evolving anti-counterfeiting role of holograms lies in their ability to combine authentication with detection—that's why enlightened pharmaceutical companies and enforcement agencies continue to make them an integral part of anti-counterfeiting strategies.

*The International Hologram Manufacturers Association (IHMA) comprises more than 80 of the world's leading hologram companies. Members are leading producers and converters of holograms for banknote security, anti-counterfeiting, brand protection, packaging, graphics and other applications. More information is available at [www.ihma.org](http://www.ihma.org).*

## Total confidence industrial ID readers and verifiers



Vision Systems

Vision Software

Vision Sensors

ID Readers

**Any code, any surface, any marking method.  
DataMan is the reliable choice every time!**

The widest range of industrial ID readers and code quality verifiers — in both fixed and handheld formats.

See the new cost-effective DataMan® handheld reader:  
[www.cognex.com/710](http://www.cognex.com/710) or call 1-800-677-2646.

# COGNEX





# We're 100% proud to bring you 100% defect detection.

In the packaging industry, there's little room for error. That's why QuadTech has acquired Vigitek, a global leader in print inspection and defect detection technology. **We now offer you the only system that delivers 100% defect detection on 100% of your product, web or sheet, 100% of the time.** That helps you deliver 100% packaging integrity and quality.

[Quadtechworld.com/leader](http://Quadtechworld.com/leader)



**100% committed to the perfection of register, ribbon and color control for 30 years.**

**QuadTech®**  
Our passion is *your success*.™

**VIGITEK**  
PRINT INSPECTION TECHNOLOGY  
  
A QuadTech® Company





# The pursuit of sustainable medical packaging

Can you comply with the FDA's health and safety requirements and still pursue **SUSTAINABLE PACKAGING GOALS?**



Those responsible for the design, development and qualification of medical packaging, including medical devices, pharmaceuticals, in vitro diagnostics and biotechnology, to name a few key sectors, have a daunting challenge to achieve compliance with the general health and safety requirements put forth by the U.S. Food & Drug Administration Code of Federal Regulations Title 21 CFR, Parts 800 to 1299. Adding sustainable packaging goals to that requirement list leads many of us to take the path of least resistance and shove sustainable packaging to the bottom of the list.

As the sustainable technology movement continues to grow, mature and become intrinsic to the business process, the medical technology sector is being tasked to incorporate sustainable technologies across its various sectors, with packaging being a huge target.

## Sustainable packaging saves money

Sustainable packaging seems to be more of a comprehensive development approach than a single

compliance goal. It's an exercise in continuous improvement for anyone engaged in its pursuit. The Sustainable Packaging Coalition describes sustainable packaging as:

- Beneficial, safe and healthy for individuals and communities throughout its life cycle;
- Meets market criteria for performance and cost;
- Sourced, manufactured, transported and recycled using renewable or recycled materials;
- Manufactured using clean



## Sustainable packaging is an exercise in continuous improvement...

- production technologies and best practices;
- Made from materials healthy in all probable end-of-life scenarios;
- Designed to optimize materials and energy;
- Effectively recovered and utilized in biological and/or industrial cradle-to-cradle cycles.

Primary package design for medical packaging is no exception. Plastics represent the lion's share of deployed materials, specifically for sterile

packaging and primary container packaging. When evaluating plastic resins and converted film for a medical packaging application, it's necessary to investigate the issues of resin density, converted yield and package performance on the final package design. Work with your resin or converted-film supplier to evaluate the facts of resin/sheet density, price per pound, package performance per film/

sheet thickness and yield. This will be a fruitful exercise in evaluating finished-package performance versus cost, based on the known data of density and a yield calculation. The higher-yield plastic may yield acceptable or improved performance (to be evaluated), and the higher yield should mean a lower cost to the medical manufacturer. Less plastic is used for the application, and this works towards a more sustainable package design.

Where the need exists for sterilization



## Introducing the new Stericlean robot

[www.staubli.com](http://www.staubli.com)

### From the medical market leader

Stericlean is a fully VHP (Vapor Hydrogen Peroxide) resistant robot. Suitable for the sterilization VHP process, it can fully automate operations in an isolator or cleanroom environment. It features special surface treatments on the arm, specialized lip seals, and stainless steel critical components. For more information call 1 800 257 8235.





compatibility and sterility maintenance, primary medical packaging must comply with ISO 11607-1:2006, entitled, "Packaging for Terminally Sterilized Medical Devices."

Costs can be cut by eliminating certain levels of packaging and packaging components.

### Medical-device packaging

In sterile barrier medical-device packaging, manufacturers should explore the clinical requirement for two sterile barriers on the medical device. Depending on the attributes of the device, including its size, geometry, complexity, number of components and the clinical procedure itself, having two sterile barriers is an unnecessary use of packaging materials and resources. Good packaging design and materials selection can allow for good practices in aseptic transfer with a single sterile barrier package. Eliminating materials is a sustainable packaging goal and a cost-savings or cost-avoidance activity.

For nonsterile medical applications, there is a greater opportunity to pursue even more sustainable packaging materials. The performance bar is set high when recycled content is present or, at the greenest end of the spectrum, biomaterials are used, in terms of having to match the properties of heat deflection, impact strength, sterilization compatibility and consistency of these properties that are usually provided by virgin resins.

Some of the primary workhorses in sterile medical packaging are modified polyethylene terephthalate

glycol (PETG) and high-impact polystyrene (HIPS).

Many medical-packaging converters are investing in research and development for the next generation of polymers and manufacturing processes to maintain properties necessary for sterile barrier performance and continuous improvement along the sustainable

packaging continuum.

Contact several medical packaging converters and discuss their product offerings along the lines of the use of recycled material in their extruded, rigid sheetstock (recycled polyethylene terephthalate [RPET]) for thermoforming, higher-yield plastics for thermoforming (amorphous PET [APET]) and the sandwiching of

recycled process materials between virgin materials.

### Secondary and tertiary package design

At levels beyond primary packaging, one can really get inventive with sustainable packaging designs.

Secondary and tertiary packaging

Continued on page 36

## Scalable Hardware – One IEC Software Environment

High End Machine Control  
→ 40+ Different Industrial PC Designs

→ IPC [PLC|NC|CNC]

High to Mid Range Machine Control  
→ CX Family of DIN Rail Mounted, Solid State, PC-based Controllers

→ CX [PLC|NC]

Mid to Low Range Machine Control  
→ Mid Range PLC Control with the BX Controller Family  
→ Low Range PLC Control with the BC Controller

→ BX [PLC]

→ BC [PLC]

→ [www.beckhoffautomation.com/](http://www.beckhoffautomation.com/)



#### TwinCAT Software

- Many controller types – one IEC 61131-3 programming environment
- From basic I/O control, all the way up to CNC, the most complex motion control

→ IPC

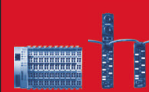
→ I/O

→ Motion

→ Automation

#### Scalable Hardware Matches your requirements and Budget

- Beckhoff's direct Sales and engineering can help you match the right controllers for your line of machines.
- Program your complete line of machines with one TwinCAT IEC 61131-3 programming environment.
- Development time and cost is greatly reduced using standardized IEC 61131-3 programming.
- Get started programming with a free fully functional 30 day version of TwinCAT IEC 61131-3 software; available at [www.beckhoffautomation.com](http://www.beckhoffautomation.com)



Beckhoff North America | email: [beckhoff.usa@beckhoff.com](mailto:beckhoff.usa@beckhoff.com)  
[www.beckhoffautomation.com](http://www.beckhoffautomation.com)  
1-877-TwinCAT (1-877-894-6228)

**BECKHOFF** New Automation Technology



Even a medical-device package, above, can be made of sustainable materials.



designs provide physical and environmental protection to the medical product.

Conventional cushioning and protective materials can be designed to use the minimal amount of material required to protect the product. Paperboard and corrugated can be deployed with post-consumer-recycled content.

A development tool for fragile

medical products, such as medical electronic equipment, is the execution of a fragility assessment or damage-boundary-curve assessment of the unpackaged product.

This requires the use of a dynamics-test lab with equipment that provides test results for vibration and shock sensitivities. Testing can be conducted in compliance with the American

Society of Testing and Materials (ASTM) Standard D3580, and the end result is a series of transmissibility plots describing the natural or resonant frequency of various components and the amplification reached at resonance.

This data can then be used to develop a package that requires the minimum amount of cushioning necessary to protect



## At Alpha Michigan, it's always New Model Season. Let us design one for you.



### Alpha delivers custom bottles with assembly-line efficiency.

At Alpha Michigan, we're driven to provide our customers exactly what they want... high-density polyethylene (HDPE) bottles and jars that combine assembly-line efficiency with head-turning custom designs. And of course, we use only FDA-approved resins and employ quality standards our pharmaceutical customers need and expect.

Extrusion blow molding equipment at our Michigan plant enables us to design custom solutions for relatively low minimum orders using lower-cavitation machines. If your needs are high-volume, Alpha offers Injection Blow Molding on high-cavity tooling at all of our plants. No matter what your volumes, our custom tooling is so reasonable you may find yourself introducing a new package with each new model year.

We can develop custom tooling in-house for a fraction of the cost and time it normally takes to create a new package – it's just one more way we put you at the head of the next curve.



the medical product during shipping, handling and distribution.

A minimum of cushioning can often mean lower costs or cost avoidance for the packager.

#### The temperature factor

Temperature-sensitive products are another specialty category of medical packaging. This is a data-intensive niche, so the need exists to laboratory-test the product for its temperature profile or environmental temperature stability and use the data to custom design temperature protection with a minimum amount of packaging.

#### The EU Packaging Waste Directive

As an outcome of pursuing sustainable packaging, one good business decision is the pursuit of compliance to the European Union Packaging Waste Directive, electrical waste and electronic equipment (WEEE) and the restriction of hazardous substances (RoHS).

The EU Packaging Waste Directive (94/62/EC) is a hierarchy of prevention, recovery and disposal. Here are just a few of its requirements:

- The packaging must be the minimum weight and volume to maintain the necessary level of safety, hygiene and acceptance for the product and consumer.

- The packaging is manufactured in such a way as to minimize the presence of "noxious and other hazardous substances," in residues from the recovery/disposal process.

- When intended for reuse, the packaging meets the requirements for safety in use and reuse, and is subsequently suitable for the appropriate recovery options.

- The packaging is suitable for recovery by recycling and/or composting and/or energy recovery.

- The packaging is manufactured so that four named heavy metals (cadmium, hexavalent chromium, lead and mercury) are collectively



contained within stated concentration limits.

- Manufacturers and/or distributors of electronic and/or electrical equipment manage and pay for the collection and further handling of WEEE products, as well as provide WEEE-related information to customers.

- The EU RoHS directive restricts the use of certain hazardous substances in products.

Manufacturers must also provide data sufficient to demonstrate compliance with all of the stated, normative references within EN 13427:2004, which basically includes packaging requirements specific to: manufacturing, composition; source reduction; material recycling and recovery; energy recovery; composting and biodegradation; measuring and verifying the four heavy metals and other dangerous substances present in packaging and their release into the environment, parts 1 and 2.

This appears to be a daunting task. However, there are a few documents that can facilitate compliance by breaking down compliance to a prescribed set of tasks. These can be located with an internet search.

Additionally, several firms provide guidance on these European requirements. These compliance activities are in direct support of sustainable packaging goals, and can improve the marketability of the medical product.

### Advancing packaging technology

Existing packaging designs can also be evaluated for use of minimal packaging materials, product protection, number of sterile barriers evaluated, the use of recycled materials or the use of higher-yield plastics, engineered temperature control and protection/cushioning.

Pursuing sustainable packaging materials can advance packaging technology within an organization as the upside of cost savings and cost avoidance. The market benefits of environmental compliance can help fuel the competitive advantage of "greener" packaging.

It appears that, from the amount of information available on this subject, everyone is taking packaging sustainability seriously.

Try working with packaging materials suppliers and converters as well as companies with testing,

engineering and regulatory-consulting expertise. Your organization's ability to leverage packaging technology is a competitive advantage in the marketing of your medical product.

#### References:

FDA, Title 21 Code of Federal Regulations Part 800-1200 (21 CFR Parts 800 to 1299).

Packaging Guidelines v.1.0 © 2006 GreenBlue

ISO 11607-1:2006 "Packaging for Terminally Sterilized Medical Devices," Part 1.

ASTM D3580, "Standard Test Method for Vibration (Vertical Linear Motion) Test of Products."

EU Packaging Waste Directive 94/62/EC.

WEEE Directive-electrical waste and electronic equipment.

RoHS Directives restriction of

hazardous substances.

EN 13427:2004: "Packaging Requirements for the use of European Standards in the Field of Packaging and Packaging Waste."

*Prepared by Karen K. Greene, technical director of DDL (www.testedandproven.com). DDL offers medical device and packaging testing services, package design and packaging prototyping.*



PRODUCT IDENTIFICATION SOLUTIONS FROM ID TECHNOLOGY

## The Specialist To Call On For Your Product Identification Challenges

**When it comes to Product Identification, you can count on the specialists at ID Technology to have all the answers.**

IDT brings years of experience, the latest technology and a complete range of labeling, coding and marking products to solve your Product Identification challenges. So whether you need print and apply, high-resolution inkjet or laser coding, or thermal transfer marking, IDT has the right solution for your needs.

Make sure to ask about the complete line of IDT consumables and how using them can qualify you for our limited lifetime warranty on all IDT parts and services – just one more reason to call the specialists at ID Technology.

And best of all, every ID Technology product is backed by our nationwide network of PMMI certified service technicians. To talk with the specialist nearest you, call **888-438-3242**, or visit **www.idtechnology.com** today.

*With the only nationwide manufacturing, sales and service network in the industry.*



Labeling Coding and Marking Specialists™

2051 Franklin Drive • Ft. Worth, TX 76106 • 888.438.3242 • www.idtechnology.com

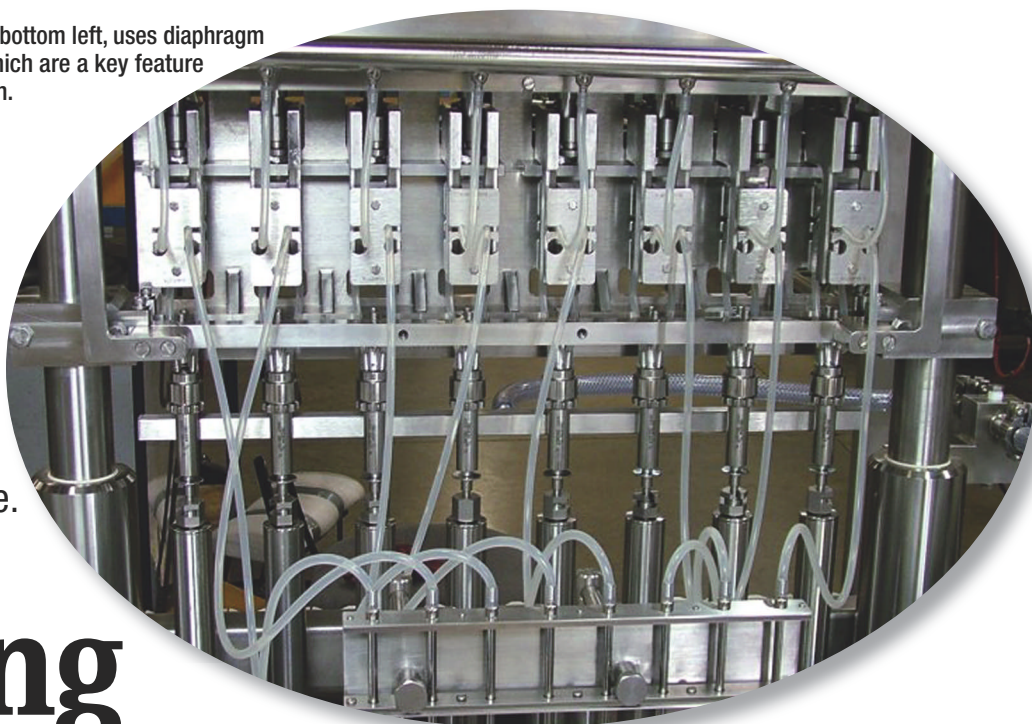
© 2008 ID Technology.

a division of Pro Mach



The filler, below and bottom left, uses diaphragm fill-pump heads, which are a key feature for smooth operation.

Facing **SIZEABLE EXPANSION** in its aseptic processing and filling business for sterile injectables, contract manufacturer HollisterStier Laboratories adds a new liquid vial-filling line.



# Vial-filling line boosts capacity

**Lauren R. Hartman**, Senior Editor

HollisterStier Laboratories LLC, a Spokane, WA contract manufacturer and aseptic processor/filler of commercial and clinical-trial sterile injectables, has a reputation for customer service and detailed project management. Its contract-manufacturing services focus on aseptic processing of lyophilized and liquid products, and it has experience commercializing vaccines, biological proteins, microspheres (a sphere sized from 0.5 to 100 mcm, made of any material), liposomes (artificial microscopic vesicles used to convey vaccines, drugs, enzymes or other substances to target cells or organs), suspensions and diluents.

The clinical-trial and commercial sterile injectables market is expected to increase 21 percent in the U.S., with more than 300 new, sterile

opportunities and growth. To keep pace, the company is completing a \$41-million facility project that has doubled laboratory and production capacity. The 20-acre site's main building has more than 191,000 sq ft with 130,000 sq ft of manufacturing space. Part of the facility upgrade includes a strategic move to add a second high-speed commercial aseptic filling line that can fill 2- to 100-mL vials at speeds to 400/min.

"We're rather original in the industry, considering that we work with both commercial and clinical-trial products," notes Jeff Milligan, vp of technical operations. "Our clients appreciate this, because they can start out at Phase One and go through all of the trial phases with us and then scale up to commercial lines. This makes things a lot easier for

**Smaller biopharmaceutical firms often can't invest in the capital equipment necessary for manufacturing facilities.**

product approvals expected by 2012. Approximately 25 percent of those are lyophilized drug products. Designed for multi-product operation, the Spokane facility manufactures products regulated as biologics, drugs and devices that range from Phase I clinical trial material to commercially available products.

Facing a busy global pharmaceutical and biopharmaceutical market landscape, HollisterStier is poised for several

customers if they start work and process development with us from the start."

## Mapping the market landscape

Market forces are prompting more pharmaceutical and biopharmaceutical companies to seek outside manufacturing capabilities, says Craig Mastenbaum, vp of manufacturing and business development. "Cost pressures, the declining number of potential blockbusters, shrinking



HollisterStier's second aseptic vial-filling line fills 2- to 100-mL vials at speeds up to 400/min.





A checkweighing station shows the line's conveyor (top), which is outfitted with V-shaped cleats that secure the vials in transport.

product life cycles, rising opportunity costs and capacity costs are forcing companies to outsource manufacturing," he says.

The trend toward opting for contract manufacturing applies both to smaller biopharmaceutical firms as well as larger, more established traditional pharmaceutical companies.

Echoes Milligan, "Smaller biopharmaceutical firms often can't or won't invest in the capital equipment necessary for conventional manufacturing facilities. They come to us for technical expertise, regulatory support and a range of capabilities that enable them to concentrate on research and development."

It's not just biopharmaceutical companies that are increasingly outsourcing their manufacturing needs. Large pharmaceutical companies come to HollisterStier in order to reduce their internal capital equipment costs and risks, Milligan notes, and to improve their efficiency, productivity and streamline the development process. Pharma companies are increasingly looking to outsource clinical-trial manufacturing, he says, to reduce the costs and risks associated with developing early-stage drugs.

Considering all of this, HollisterStier began to examine the possibility of adding another aseptic filling line as much as three years ago. Given the substantial leadtime for such an installation, as well as validation procedures and other time-consuming aspects, the company had to assess market needs and predict likely trends.

"Taking into account customer inquiries, the market landscape and a host of other factors, we thought this was a good move," says Milligan. "Given that we started researching this late in 2005 and products won't be coming off the line until 2008, we had to make sure our business analysis was accurate. This was a very strategic acquisition."

To provide the integrated vial-filling/sealing equipment necessary, HollisterStier called on **Bosch Packaging Technology** ([www.boschpackaging.com](http://www.boschpackaging.com)), already a partner on its existing lines. One advantage to choosing another Bosch system is that it will help streamline regulatory approvals and increase flexibility, Milligan says.

Products can be transferred from one line to another with minimal validation and oversight.

A collaborative approach in design, construction

and implementation, the line was integrated and underwent factory acceptance testing in Bosch's plant in Minneapolis in cooperation with the HollisterStier team, with substantial parts of the installation and operational qualifications performed at the Bosch facility.

As a result, the line was quickly qualified and validated. "That way," explains Keith Bear, senior engineer at HollisterStier, "all of the kinks were worked out by the time the line was installed, and there were no surprises."

For this project, HollisterStier selected Bosch's FLC 3080 liquid vial-filling system, which enhances Bosch's equipment lineup in the medium-output range. Compatibility of pharmaceutical products with the filler was most important.

HollisterStier wanted to fill a variety of formulations on the new line, including monoclonal antibodies, proteins, diluents, suspensions and microspheres. The continuous-motion filler handles product volumes of 0.5 to 500 mL and containers from 14 to 78 mm dia and 30 to 180 mm tall.

The line's conveyor system with V-shaped cleats, transports the vials through the filling station, offering size change advantages for the different vial sizes as well as ease of use, high reliability and reproducible production settings.

Installed in September 2007, the servo-driven line is housed in a new wing of the facility that uses a similar design as the initial vial line and some of the existing systems, such as a clean-steam system and a quality-assurance infrastructure.

With an integrated touchscreen control panel, gentle container transport and a choice of two to eight fill heads (HollisterStier's system uses eight), the line is still being tested as of presstime, but is expected to begin production runs in September 2008. All validation steps have been completed, Milligan tells PD, so the next and final

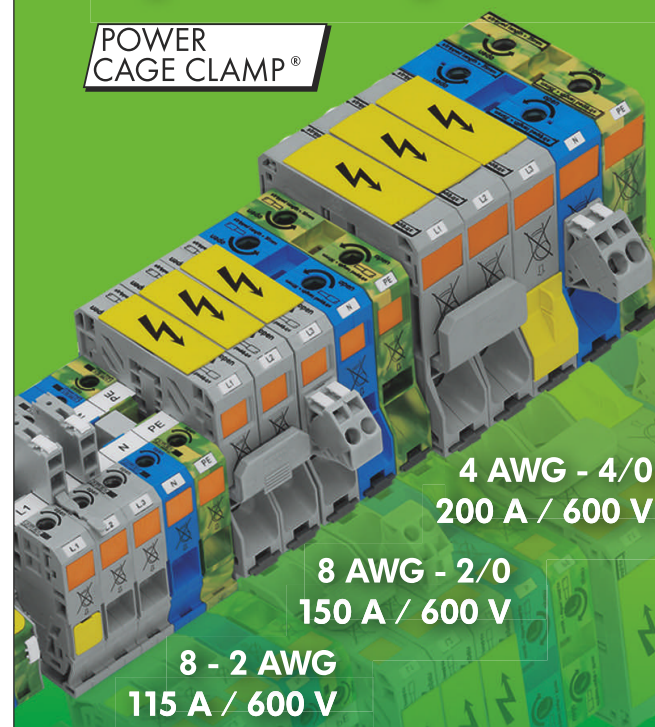
procedure before actual product may be authorized for production on the line is executing process-validation runs under protocol and meeting all product specifications and efficiency levels.

One of HollisterStier's critical requirements for vial filling is flexibility, especially in the constantly shifting pharmaceutical sector. Initial concepts for the new line included filling liquid, sterile diluents in vials from 2 to 100 mL and openings from 13 to

Continued on page 40

## No Torque Specs Required...

POWER CAGE CLAMP®



No torque driver required – the POWER CAGE CLAMP® provides the appropriate clamping force for any type of conductor, even compensating for wire deformation over time.

WAGO's POWER CAGE CLAMP® is the exclusive line of spring pressure terminal blocks up to 4/0.

### Quick and Easy Wiring

Up to 50% faster than screw terminals  
Hands free wire termination  
Standard tools for operation – no torque driver

### Full Line of Accessories

Power tap  
Push-in jumper  
Test plug adapter, marking, covers and more

### Reliable Connection

Same safe and reliable connection as with WAGO's original CAGE CLAMP®  
Maintenance free – no screws to re-tighten  
Vibration proof, corrosion resistant  
connection every time

For a brochure, contact WAGO today at  
1-800 DIN RAIL (346-7245)  
or [info.us@wago.com](mailto:info.us@wago.com)  
[www.wago.us/powercc.htm](http://www.wago.us/powercc.htm)

**WAGO**®  
INNOVATIVE CONNECTIONS

### Key factors affecting pharma packaging:

- Market expansion of contract pharmaceutical manufacturing/packaging
- More outsourcing
- Pharma companies looking to reduce costs and risks of developing early-stage drugs
- Equipment, plant upgrades
- Increased quality control
- Boosting output, ease of use



28 mm, and involved the option of adding lyophilization capabilities at a later date. The modular construction of the FLC allows for easily adding on more equipment, should HollisterStier's needs change.

"Modularity is always an advantage," notes Bosch project manager David Plansky. "It allows more people to work simultaneously on a project during the early phases, which reduces costs and minimizes

development time."

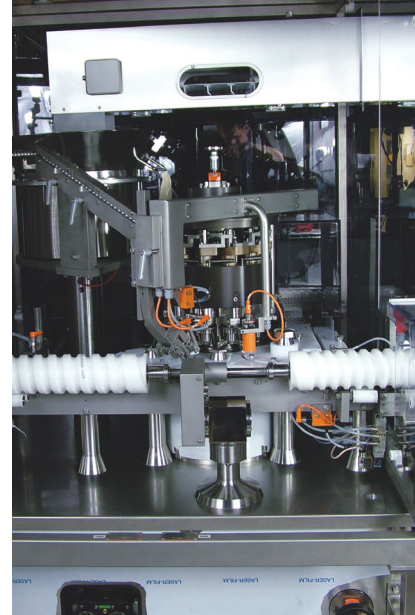
### Filling aseptically

Aseptically filling in an ISO 5 (Class 100) clean room, the new line can run three vial sizes: 2- and 3-mL vials run at 400/min and a 10-mL size runs at 240/min.

For starters, the vials are manually loaded into an RRU3084 rotary washer and then enter an HQL 4680S depyrogenation (drying/sterilizing)

tunnel. HollisterStier and Bosch were able to collaborate on designing and integrating a chilled-water system and heat exchanger to support a "cool-zone" sterilization area within the tunnel that sterilizes the containers using dry heat. The tunnel also features unidirectional air flow for temperature stability and uniform heat distribution.

Milligan says that before they're filled, the vials are also weighed and



The rotary capper applies the caps with the aid of a vial-rotation system. A rotation-verification sensor ensures even crimping onto the vials every time.

a tare weight is calculated. The vials then are fed single-file on a conveyor via an infeed starwheel, which spaces the vials evenly for reliable delivery to the filler.

### Diaphragm pump a must

The FLC filler uses diaphragm fill-pump heads that Milligan says are another key advantage and are critical for smooth operation, with highly repeatable filling volume. The rolling diaphragm fill pump—one of four filling-system options available for the FLC system—is designed for gentle handling of sensitive proteins and other such products.

"It's very gentle on our protein-based products versus other types that generate a certain amount of shear during the filling process, which we don't want for biological products," he says. "Similar to a piston pump, this pump utilizes a diaphragm that needs no liquid product to act as a buffer. It's essential that we use these diaphragm pumps. They are servo-motor-actuated, which allows them to be fine-tuned to meet every fill-volume specification. Setup is quicker and fill-volume accuracy is much better and more consistent."

Vacuum and product pressure create differential pressure across the pump's diaphragm, which pushes the piston outward, filling the liquid chamber. At the end of the piston stroke, an inlet valve closes and a discharge pinch valve opens. An actuator drives the piston inward, forcing the liquid product out of a discharge port. At the end of the piston motion, the discharge valve closes and the inlet valve opens; the cycle then repeats itself.

After filling, the vials are weighed again to determine the weight of the dispensed product. If the in-process weight control detects a trend in filling weight, it is corrected by

## Sometimes You Can't Prevent Moisture Damage...



### For Less Catastrophic Conditions There's TranSorb®

Once the temperature and humidity inside a transport container begin to change, container "rain" forms — leading to rust, corrosion, mold, mildew and other damage to valuable goods. Laboratory tests confirm that each and every TranSorb® Sorbent Pack will adsorb over a pound of container "rain" without sweating or leaking. Let our technical team assist you in protecting your next shipment.



+1 716.824.8900  
[www.multisorb.com](http://www.multisorb.com)



**MULTISORB**  
Technologies



automatic adjusting the filling point. The weight of the stopper is also factored into the calculation (HollisterStier declines to identify the vial, stopper and closure suppliers).

Another feature that Milligans says HollisterStier likes is that the system is nondestructive, so that no product is wasted to monitor fill volume.

Bosch customized several features on the line to meet HollisterStier's specifications. Given that many of HollisterStier's products handled on the line are sensitive in composition, an oxygen-reduction system (ORS) was added to inhibit oxidative degradation of the pharmaceuticals. A manifold produces a downflow flood of nitrogen to the filled vials that evacuates all but about 3 percent of the oxygen left in the vials just before they're stoppered, Plansky says.

"To change the line over, you just turn some cranks or knobs and the parts can be quickly replaced with others, so it's very quick and efficient," Milligan says.

Next, the stoppers are immediately applied on a

## Programmable tray loading

At this end of the line, the capped vials then feed into a Bosch GLT 4040 tray loader with servo-controlled robotic functions that make adjustments for different container sizes and tray configurations quick and easy. The loader can be programmed for tray-loading patterns such as square or honeycomb and works with either stainless-steel or fiberglass trays.

"Bosch was professional at integrating our ideas into their line design, and was open to communications from our technicians regarding concerns about spacing, ergonomics and other aspects of the system that needed to be tailored to our needs," Bear points out. "That flexibility and the experience of their engineers were some of the big advantages."

Enclosing the line is an isolating or restricted access barrier system (RABS) that was also customized to a certain degree. The barrier provides an internal ISO 5 (Class 100) environment within an ISO 6 (Class 1000) clean room. Given

the intricate smoke studies of laminar flow patterns that HollisterStier performs, along with computer simulations, the decision was made in consultation with Bosch to have a system without glove ports, normally a common feature of an RABS.

"We discussed the advantages and disadvantages of glove ports in some detail," recalls Plansky. "But at the end of the day, there was a collaborative effort to assess air flow patterns and everyone was very confident: If you have proper air flow, there's no need for glove ports."

Bear says that Bosch was also able to provide a "door" within the main barrier that lets operators reach inside, with air flow patterns maintained while the door is open.

The system's Plexiglas walled enclosure has an offset mounting in the same plane as the inside of the framework of the RABS, which creates a smooth surface that further stabilizes the air flow.

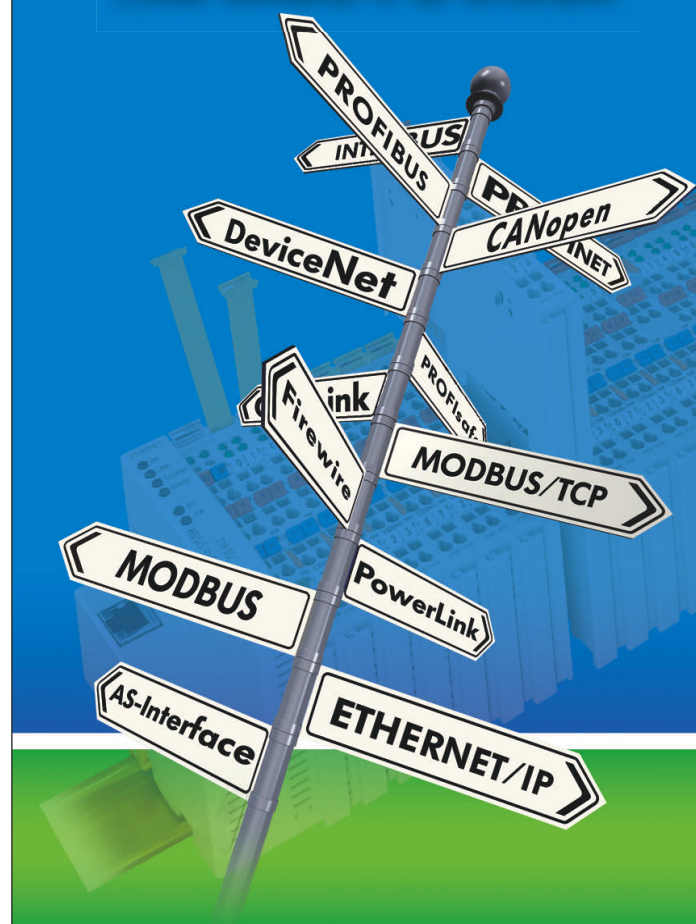
## A comfortable fit

Though there have been many technical factors, the new line is freeing up the overloaded existing commercial filling line and will ease the extra time involved to fill customer needs. "It will really balance the capacity in our facility to have this line running full-scale production," Milligan says. "It's easy to do equipment testing with Bosch." Mastenbaum sums up by saying, "We felt quite comfortable expanding with Bosch. They have proven technological expertise and our previous experience demonstrates that their post-sales service is exemplary."

### More information is available:

Bosch Packaging Technology, 763/424-4700.  
www.boschpackaging.com.

## All Signs Point to... ...the WAGO-I/O-SYSTEM



Fieldbus I/O requirements pulling you in different directions? Choose the fieldbus independent WAGO-I/O-SYSTEM for all your I/O needs.

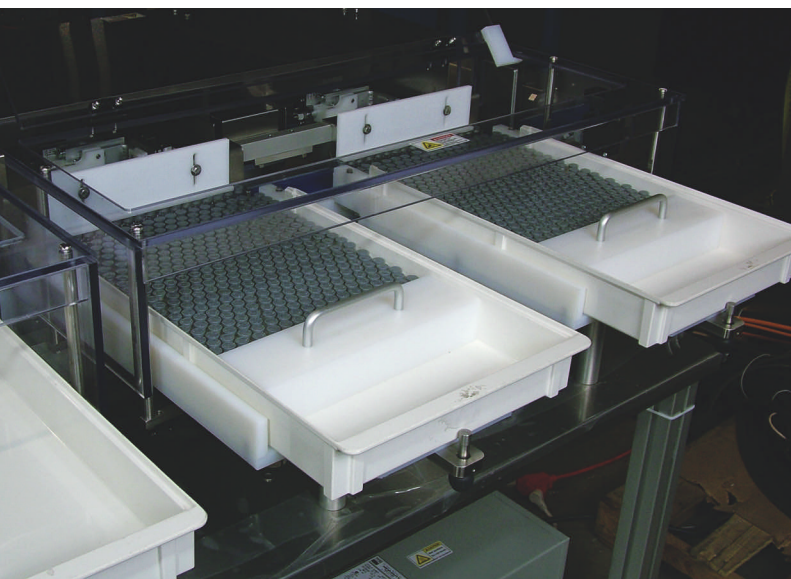
### The System

- Over 25 bus-couplers supporting over 16 fieldbus protocols
- More than 300 analog, digital, and special function I/O modules
- Granular 1, 2, 4, or 8 channel modules - buy only the I/O you need
- Modular, DIN rail mount rack-less design - easily add and remove I/O

### The Benefits

- Easily connect to any PLC CPU for local or distributed I/O applications
- More cost effective and flexible than PLC expansion racks and PLC I/O
- Reduce inventory and component cost with one I/O hardware platform
- Reduce cabinet space - modules less than 1/2" wide and bus-couplers approximately 2" wide

For more information on becoming fieldbus independent, contact WAGO at 1-800-DIN-RAIL (346-7245) or [info.us@wago.com](mailto:info.us@wago.com)  
[www.wago.us/fieldbus.htm](http://www.wago.us/fieldbus.htm)



At the end of the line, the capped vials are fed into a robotically controlled tray loader that can accommodate different tray and vial configurations.

Bosch stopper applicator. The stoppers are loaded into a supply hopper via a pivoting tray and feed from a chute into an orienting bowl before they're placed onto the vials by a horizontally operating vacuum wheel. The stoppers travel a short distance before encountering the vibratory bowl that orients them in the track.

The pivoting tray is another customized feature from Bosch. The tray is designed to maintain air flow. Another tilting tray merges with a customized cap-feeding elevator, allowing the aluminum crimp-on caps with plastic flip-tops to be loaded into the elevator hopper from the operator side.

## Air flow is key

Keeping particulates to a minimum by disturbing the unidirectional air flow as little as possible, the Bosch VRK 4010 rotary capper applies the caps with the aid of a vial-rotation system. A rotation-verification sensor ensures that the caps are evenly crimped onto the vials every time.

With a no-stopper/no-cap feature and container detection at the infeed, the machine feeds the caps in a similar manner as the stoppers, with a vibratory bowl that orients them in a track, to be topped onto the vials traveling below them.





# The proof is in the process

**Tim Avery**, Assistant Editor

Recent Federal Drug Administration (FDA) regulation changes for the pharmaceutical industry are forcing many firms to adjust their processes (see sidebar). The largest pharmaceutical packager in the business—Catalent Pharma Solutions—is no exception. Catalent's proprietary designs include the RxBarrier+™ Plus for oral solid medications, DelPouch® unit-dose delivery system for lotions, creams and ointments and the DelStrip® unit-dose delivery system for thin film strips.

"The impact of the new FDA regulation means that the packaging inserts will now be larger and more complex to accommodate the addition of

Pharmaceutical packager Catalent installs proofreading software

**TO HANDLE NEW REGULATIONS AND DEMONSTRATE RELIABILITY.**

various features and the increase in font size of the text," says Maria Serra, quality assurance manager for Catalent's Puerto Rico facility. "Reading a sheet of that size will consequently take more time and larger equipment to accommodate the larger insert sizes," she says. "Our goal is to reduce the time it takes for verifications in order to increase efficiencies for both our customers and ourselves."

Big changes are now unfolding at the 82,000-sq-ft plant, which employs 160 and produces more than 5 million inserts and 80 million labels each year in various languages. The company is switching presses, installing folders to increase capacity around large-formats, adding ergonomic pieces to its cutters for handling heavier bundles and adopting computer-to-plate processing. Another significant adjustment is Catalent's recent installation of Digital-Page, proofreading software from **Global Vision** ([www.globalvisioninc.com](http://www.globalvisioninc.com)).

"We have been working with Global Vision for more than 10 years," says Serra. "We already have the Scan-TVS, the scanner-based artwork comparator system, and we really wanted to

# Kick the bucket.

Let CDF show you how — and why.

Stop by booth #2920 at ISSA/INTERCLEAN®, September 9 -11, 2008, at the Las Vegas Convention Center. Or visit us online at [www.cdf1.com](http://www.cdf1.com).

**CDF Corporation**  
innovative liquid packaging solutions



innovative liquid packaging solutions • flexible • not rigid • cores flat • greener • cost effective • no splashing • lower transport cost • reduced storage space



incorporate Digital-Page so that not only our production department can benefit from this technology, but also our prepress department. It would enable us to shift from a manual proofreading process to an automated process, allowing for quicker verifications, better error detection and a happier QC staff."

"With many changing regulations

## FDA rule change

The FDA published a final rule entitled "Requirements on Content and Format of Labeling for Human Prescription Drug and Biological Products" in January 2006. Its stated impetus for the regulation changes was "an increase in the length, detail and complexity of prescription drug labeling, making it harder for health care practitioners to find specific information and to discern the most critical information."

Under the new rule, prescribing information must include three sections: Highlights, Contents and Full Prescribing Information (FPI). FPI includes any information that the FDA deems should accompany the drug. Its headings and section order have been revised for improved organization. Highlights—suggested to run one-half page in length—appears at the top and presents a concise summary of the information considered most critical to physicians. Contents lists all the headings and subheadings within FPI for ease of reference.

The regulation changes also introduce more graphic requirements. Previously, only the Medication Guide distributed to patients had a minimum font size, 10 pt. Added to that, all trade labeling—defined as "on or within the package from which the drug is to be dispensed"—must now be no smaller than 6 pt. All other labeling—such as on promotional materials—cannot be under 8 pt. Also, white space and bolding standards are now specified.

The FDA estimates that the labeling revisions will cost \$140 million over 10 years for reformatting, investment and increased print demands. In the same period, however, the agency expects \$510 to \$580 million in savings from a decrease both in the occurrence of adverse drug events and the time demands placed on health care practitioners.

The changes took effect on June 30, 2006, but all drugs approved within the five years leading up to the rule are not forced to comply until one of five deadlines between June 2009 (for the newest products) and June 2013. For more information, go to [www.fda.gov](http://www.fda.gov).

and the need to achieve complete content integrity, it is becoming increasingly important for those in the pharmaceutical industry to be able to ensure complete accuracy on all packaging components," says Global Vision president Reuben Malz. "Our solutions are designed to eliminate the risk of errors and give peace of mind during the content-verification process."

Catalent uses Scan-TVS on the

production floor to verify from the customer proof to the first sample copy off the press. Digital-Page, which works between electronic files, was incorporated into the prepress workflow, giving Catalent a chance to catch any errors that may have occurred prior to the actual printing."

## A fool-proof workflow

The system—which meets FDA 21 CFR Part 11 and EMEA

requirements—automatically overlays two files and compares them on a pixel-to-pixel basis to uncover any discrepancies. At Catalent, artwork for the inserts and labels arrive as PDFs. The first step for the prepress department is to make a copy—either in PDF or EPS format—that will be the working file up to the sample press run. Here, Digital-Page performs its first check, comparing Continued on page 44

## Revolutionary design eliminates 4 bulk bag unloading problems



**Cinch spouts concentrically with POWER-CINCHER® flow control valve\***

Unlike opposing bars that pinch the spout of partially empty bags from two sides, the POWER-CINCHER® flow control valve\* cinches the spout concentrically—on a horizontal axis for easier tie-offs and greater flow control, and vertically in a tight zigzag pattern to prevent leaks. In addition, it resists jamming, breaking and leaking, and allows full-open discharge from bag spouts of all popular diameters. USDA Dairy Accepted.



**Eliminate dust during hook-up/discharge with SPOUT-LOCK® clamp ring\***

The SPOUT-LOCK® clamp ring\* creates a high-integrity, sealed connection between the clean side of the bag spout and the clean side of the telescoping tube. This prevents contamination of the product, while eliminating the plant contamination that occurs when falling material rapidly displaces air and dust. It also stretches the spout downward in combination with the TELE-TUBE® telescoping tube\* (at right).

## unloading problems



Models for hoist and trolley loading (shown) and forklift loading, available with flexible screw conveyor (shown), pneumatic conveying system, outlets to suit any process, and integrated scale system for loss-of-weight batching directly from bags.



**Eliminate dust during disconnect and bag collapse with BAG-VAC® system**

The BAG-VAC® system vacuums displaced air and dust from the receiving vessel and returns clean air to the plant. The vacuum also causes empty bags to collapse dust-free prior to disconnect, eliminating the dust emitted during manual flattening of empty bags. With optional double-wall telescoping tube, it vacuums any particles dropped from spout creases during disconnect, while eliminating awkward access ports.



**Prevent dead spots and promote flow with TELE-TUBE® telescoping tube\***

The TELE-TUBE® telescoping tube\* pneumatically raises the SPOUT-LOCK® clamp ring\* (at left) for connection to the bag spout, then allows it to lower, applying continual downward tension. As a result, the spout is kept taut at all times, preventing excess spout material from bulging outward (creating dead spots) or falling inward (creating flow restrictions). Works in unison with FLOW-FLEXER™ bag activators to promote flow.

## Patented advances make other designs obsolete

Flexicon innovations boost the productivity, safety, and cleanliness of your bulk bag unloading operations far beyond the limits of other designs. And unlike Flexicon's previous unloaders, widely copied by competitors, these new generation machines are based on advances that are patented or patent pending.

Flexicon also offers a wide range of other mechanical process equipment—as well as weigh batching and blending stations—as individual units or engineered, automated systems integrated with your new or existing process—constructed and finished to industrial, food, dairy and pharmaceutical standards.

**FLEXICON CORPORATION**  
2400 Emrick Blvd, Bethlehem, PA 18020-8006 USA  
Tel: 1 888 FLEXICON (1 888 353 9426)  
Tel: 1 610 814 2400 • Fax: 1 610 814 0600  
E-mail: [sales@flexicon.com](mailto:sales@flexicon.com)

**UNITED KINGDOM** +44 (0)1227 374710  
**AUSTRALIA** +61 (0)2 9482 4033  
**SOUTH AFRICA** +27 (0)41 453 1871

[www.flexicon.com](http://www.flexicon.com)

See us at PACK EXPO Booth #E-7603



# flexicon®



## Convey pneumatically to/from multiple discharge/inlet points

Flexicon pneumatic conveying systems transport a broad range of bulk materials over short or long distances between single or multiple inlet and discharge points in small to high capacities. Offered in both positive pressure or vacuum configurations, from single-point "up-and-in" installations to mobile units to cross-plant systems complete with rotary airlock valves, pick-up adapters, filter receivers, cyclone separators, fill/pass valves, hand-held pick-up wands, silos, day bins and more. Available designed, constructed and finished to industrial and sanitary standards.



## Convey free- and non-free-flowing materials

Convey free-flowing and non-free-flowing bulk solids ranging from large pellets to sub-micron powders—including materials that can fluidize, degrade, pack, cake, smear, seize or plug in other conveyors—with no separation of blended products. Units convey vertically, horizontally, or at any angle—through small openings in walls or ceilings—around, over, or under obstructions. The only moving part contacting material is a rugged flexible screw, increasing reliability and cutting maintenance. Enclosed conveyor tube prevents contamination of product and plant environment. Cleans quickly, easily. Individual conveyors available as well as plant-wide systems with automated controls.



## Connect bulk bags quickly, easily, safely at floor level

New SWING-DOWN™ bulk bag filler\* lowers and pivots the fill head, stopping it in a vertically-oriented position that places the bag inlet spout inflatable connection, inflator button, and four bag loop latches within one arm's length of an operator standing on the plant floor, allowing safe, rapid bag connections. Eliminates danger of stepping onto and over roller conveyors to access rear bag hooks and spout connection collars, standing on the conveyor with head and arms inserted beneath operational fill head components, and straining to pull bag spouts upward over inflatable collars while reaching for bag inflator buttons. Available to industrial, food, dairy and pharmaceutical standards with numerous performance enhancements.



\*Patent(s) granted and/or pending. ©2005 Flexicon Corporation. Flexicon Corporation has registrations and pending applications for the trademark FLEXICON throughout the world.



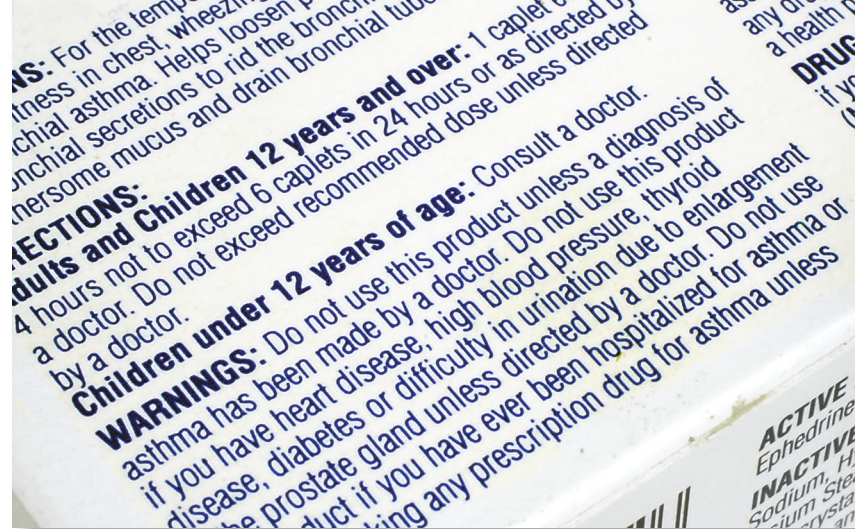
text, fonts, graphs, images, missing or added elements as well as color and registration errors in the customer's original file and Catalent's copy.

If no discrepancies are found, prepress develops the copy into proofs and step-and-repeat layouts. Before printing a sample label or insert, the files are verified again against the original. The final check happens with Scan-TVS at the production level. Here Scan-TVS is used to scan the printed sample

and compare it to the customer's file to ensure that the content remains unchanged.

"What we are doing with Digital-Page is supporting the efforts of our customers to have a proof-less process," says Serra. The "proof-less" goal is to have a workflow with enough reliability that a customer will let Catalent's prepress and quality-assurance departments give the final go-ahead before starting the full press run.

"We can save our customers time because



The FDA's regulation changes are intended to make increasingly complex drug labels more readable.

we currently cannot go to press until we receive approval from them," says Serra. "Using a proof-less process, we could approve a proof within hours instead of days as it eliminates the need for our customers to physically come to our facility to review and approve it."

One target for Catalent is product launches, which it says it already performs more than any firm in the industry. "If the customer

## Using a proof-less process, we could approve within hours instead of days.

wants to launch a new product, they have time constraints because they want to have that product in the market as soon as possible," says Serra. Turnaround time is typically 24 to 48 hr, but going "proof-less" would shift launches into a higher gear. All that remains for Catalent is to bring its clients onboard.

"We do have a big customer—Pfizer—that has come to the facility," says Serra. "If they approve our test, they will certify us as a proof-less supplier and allow us to make revisions without hard-copy proofs. Pfizer is the first to do this, but once you have one customer, others will come and see."

The early results from Digital-Page are promising and have Catalent eyeing further investment. "One of the other facilities will probably be joining us in the same effort and, internally, prepress is so happy that they are willing to install another Digital-Page system," says Serra. "The product supervisor would like another at once."

# HLP Clear Packaging *since 1969*

*We Make Your Masterpiece Complete*



*High quality service*  
*Leading delivery times*  
*Premium packaging solution*

[www.hlp-pack.com](http://www.hlp-pack.com)

Email : [sales32@hlp-pack.com](mailto:sales32@hlp-pack.com)  
Call us today at 1 888 HLP PACK.



HLP Clear Packaging Products (U.S.A.) Inc.  
Headquarters Tel : 310 659 7883 Fax: 310 618 8022 20710 Manhattan Place, Suite 108 Torrance, CA 90501



More information is available:  
Global Vision, 800/501-0511.  
[www.globalvisioninc.com](http://www.globalvisioninc.com).



# Always on full



Includes feeding bin



Secondary level check



Easy access filter

***Nordson® ProBlue® Fulfill™ integrated melter and feed systems increase production efficiency by automatically keeping the adhesive tank full.***

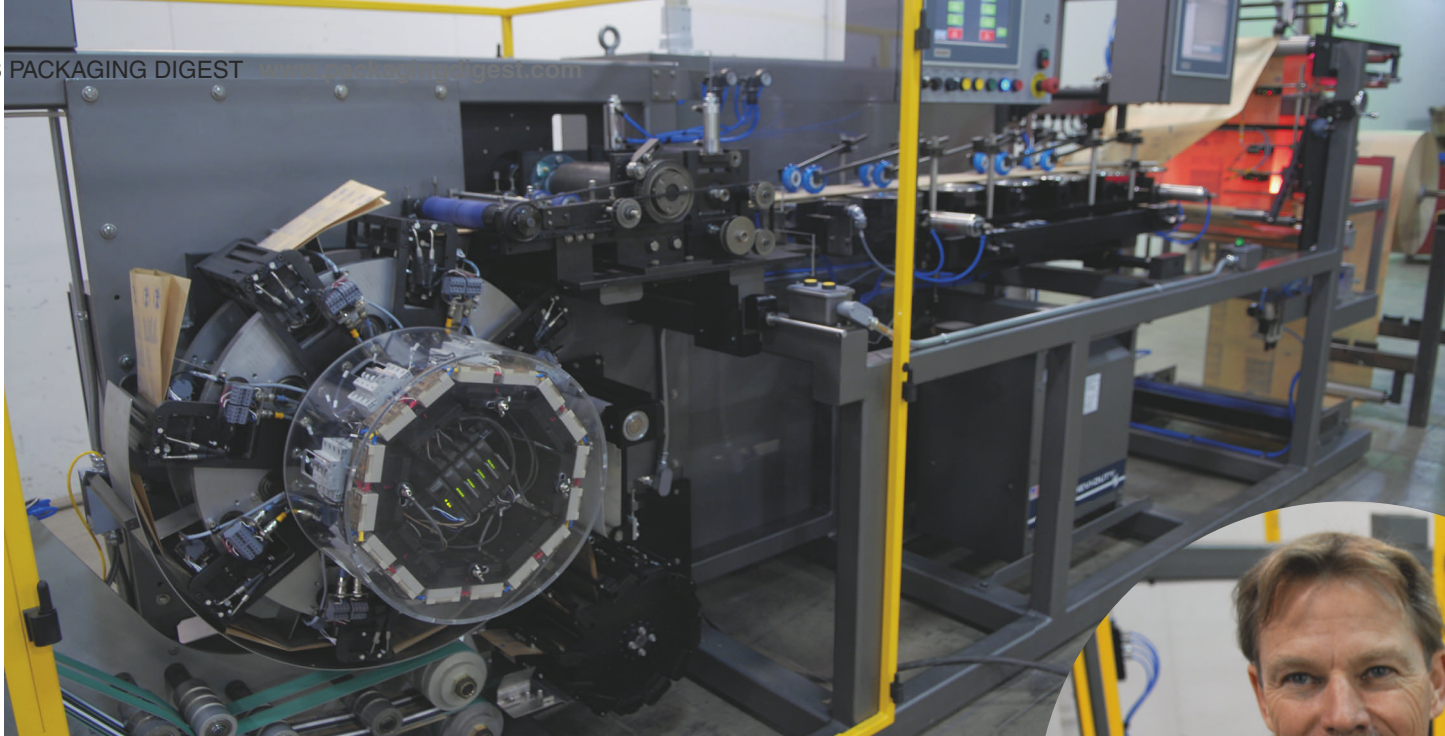
- Frees operators to perform other tasks
- Operates with a wide variety of adhesives
- Reduces downtime by delivering uninterrupted operation
- Eliminates a source of char that clogs nozzles
- Prevents contamination from moisture, dust and debris
- Reduces manual lifting strain and contact with hot surfaces
- Provides quick, easy installation with factory-set controls

For more information on how ProBlue Fulfill adhesive systems can bring efficiency back to your packaging line, call Nordson today at 800-683-2314 or visit us on the web at [www.nordson.com/ProBlueFulfill](http://www.nordson.com/ProBlueFulfill).



When you expect more.®





PC-based controls provide a higher degree of accuracy in the bagmaking machine's finished product.

# PC-based controls keep production popping

Embedded PCs don't eat into the bottom line for a builder of microwave popcorn machines.



Dennis Hohn,  
president of Talon Mfg.

**Edited by Jack Mans,**  
Plant Operations Editor

As a snack with its own button on most microwaves, popcorn is about as iconic as you can get in American comfort foods. Despite its convenience, a great deal of technology goes into those microwave popcorn bags before they puff kernels into steaming bowlfuls of that essential movie-night treat. **Talon Mfg. ([www.talonmfg.com](http://www.talonmfg.com))**, Spring Park, MN, provides high-end microwave-popcorn packaging systems with the latest in controls technology to make sure those microwave bags are perfect. Talon is a premier supplier of microwave-popcorn and other snack-food bagging systems, shipping machinery to 17 different countries. Talon machines are priced to be cost competitive, with high overall value. Even more importantly than machine cost, Talon strives to stay at the forefront of technology, which led the company to undergo a major controls upgrade at the beginning of this year.

After deciding he had reached the limits of traditional rack-mount programmable-logic controllers, Talon president Dennis Hohn sought a high-performance automation platform that the company could use as its standard for years to come.

For its previous system, Talon relied on multiple suppliers; the PLC, operator interface and servo system were all supplied by different vendors. "We wanted to streamline these elements and purchase them all from a single supplier," Hohn says. "The controls had to be more cohesive, with more features and better performance,

while passing on cost savings to our customers."

When one of the year's first popcorn bagging-machine orders arrived at Talon in 2008, Hohn decided it was time to implement the new controls-system project at full speed. However, with just a few months to complete the project, there was little time to spare in learning new controls hardware and software. "As panel space is obviously very important, the new supplier would have to provide more control in a smaller device format," Hohn says. "With the more traditional PLC-type approach, we found that we had to make our panels bigger and bigger as we added hardware to keep up with our machine-control requirements. Also, the complexity of wiring all these devices was compounded every time we tried to significantly increase performance, especially as we increased the number of motion axes. Ultimately, Talon chose to move completely in the direction of high-powered, personal-computer-based controls," Hohn notes.

With an assortment of PC-based controls suppliers identified, Hohn and his team at Talon began a concerted effort to identify the right PC-based fit for their packaging machines.

## PC-based controls

Talon gained first-hand experience with the power of PC-based controls when integrating one of its PLC-based popcorn bagging machines

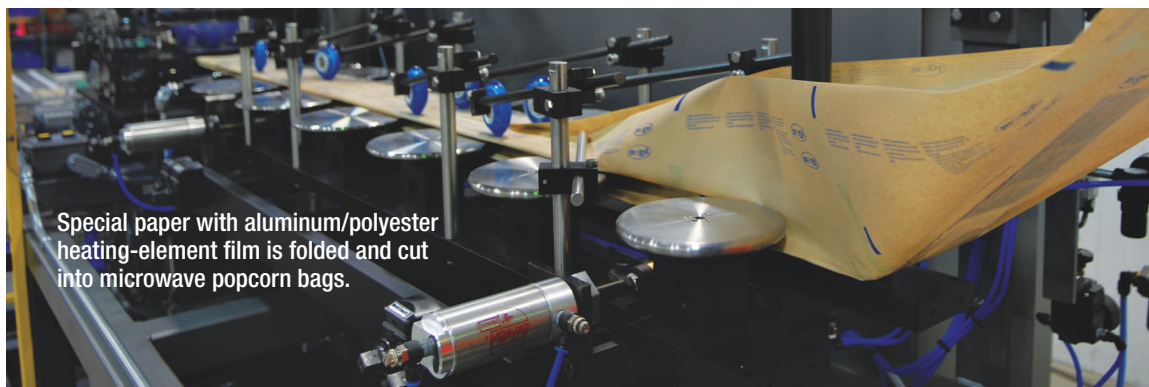
with boxmaking equipment from another machine builder. That particular PC-based system was supplied by **Beckhoff Automation ([www.beckhoffautomation.com](http://www.beckhoffautomation.com))**. As a number of PC-based solutions were evaluated, Talon re-encountered Beckhoff and selected the company as the single-source supplier for Talon's new automation and motion-control system.

The first application of the Beckhoff technology was on a popcorn bagmaking machine. This redesigned Talon machine includes Beckhoff's CX1020 embedded PC with TwinCAT NC PTP software for automation and control functions, bus-terminal input/output, EtherCAT I/O terminals, TwinSAFE terminals for safety functions and AX2000 servo drives paired with AM305x servo motors. In addition, Talon uses two types of Beckhoff 12-in. display panels: CP6201 panel PCs for all-in-one control and display devices, and CP6901 control panels for simple human/machine interface hardware. To complement the hardware, Talon purchased human/machine information software from **InduSoft ([www.indusoft.com](http://www.indusoft.com))** to design a high-end, easy-to-use array of pushbuttons, menu screens and display graphics. Software from InduSoft also helps provide a visual representation of the system monitoring.

"The CX1020 embedded PC was selected largely due to its small housing format," says Hohn. "Its

design as a high-end industrial PC that fits on the DIN rail became a major space-saver for us when compared with the old PLCs," says Hohn. "Also, the embedded PC's

Continued on page 48



Special paper with aluminum/polyester heating-element film is folded and cut into microwave popcorn bags.





# Impulse

## Will She Choose Yours?

Visit us at  
HBA Global Expo  
Booth #2131

She came in to pick up a prescription and remembered she needs lip balm. The impulse purchase. It's all about visibility. She sees it; she buys it. And "it" had better be your product.

We know that packaging has to work where it counts: in a sales pitch, in your boardroom, on your production line, on your balance sheet — and most importantly — in that space between the shelf and the cart. Boosting impulse purchases is just one of the ways our transparent packaging can work for you.

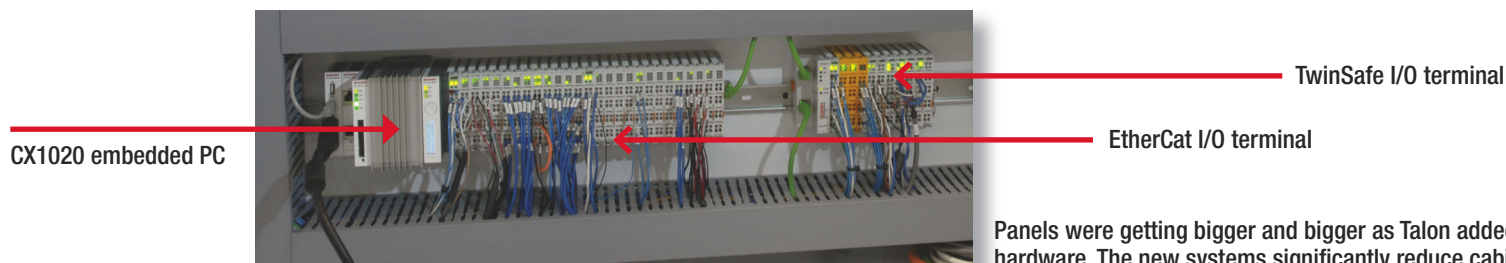
Let us take on your toughest packaging challenge and give your product a competitive edge. That's our undeniable impulse.



888.449.8520  
[www.transparentcontainer.com](http://www.transparentcontainer.com)

**Transparent Container**  
Visual Packaging Solutions





Panels were getting bigger and bigger as Talon added control hardware. The new systems significantly reduce cabinet size.

direct connection to the Beckhoff I/O terminals made its selection that much easier. Windows XP is used as the operating system to provide numerous helpful tools from the office world for use on our machines.”

Talon selected the TwinCAT NC PTP software package, which includes axis-positioning functionality (e.g. set-value generation and position control), an integrated-software PLC with a numerical-control interface, an operating program for commissioning and I/O communication to motion axes. TwinCAT NC PTP replaces conventional positioning modules and NC controllers. Talon enhanced its software with the purchase of the Modbus RTU library. This library offers copy/paste function blocks for quick and easy serial communication with Modbus devices.

Using EtherCAT as the system fieldbus brought ultra-high speed and deterministic control into the equation for Talon. “Even though it provides

extremely high performance, EtherCAT I/O is actually even less expensive than most traditional I/O systems through the use of standard Ethernet-based components and cabling,” Hohn says. “Avoiding expensive fieldbus cards and even more expensive fieldbus cabling is critical to protecting our machines’ cost competitiveness.”

## The embedded PC on this machine was selected due to its **small housing format**.

Also, the Beckhoff Bus Terminal I/O, which is connected to EtherCAT via BK1120 bus couplers, replaced many of the simple terminal blocks used in Talon’s previous system design. “This eliminated numerous connections that had to be wired back to the PLC. The fewer number of contacts, the better for overall system reliability,” Hohn adds. For control of popcorn-bag gluing functions, Talon uses a KL5121 bus terminal that serves as an incremental

encoder-interface with programmable outputs.

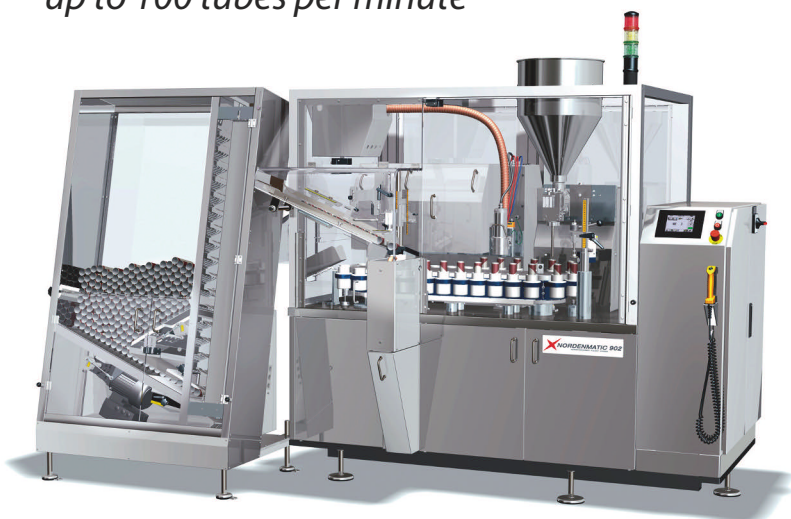
Beckhoff TwinSAFE terminals are also used on the Talon machines to flexibly integrate safety functions with standard control and automation functions. TwinSAFE does not require a special safety network and can be installed alongside a nonsafe bus terminal I/O without restrictions.

“TwinSAFE is a highly streamlined way to implement safety tasks, so this also helped us reduce the space used in our cabinets that much more,” says Hohn. “The clean architecture of TwinSAFE permits far more efficient wiring efforts. In retrospect, third-party safety controllers wired to run over safety-only networks seem far less practical.”

“Everything is tied together with TwinCAT; all of the Beckhoff hardware, from the I/O to the controls to the safety, is fully integrated in this one software platform,” Hohn says. “With onsite training and support from Beckhoff, we were able to get the new

## One for all - the new **NORDENMATIC 902**

up to 100 tubes per minute



Sirius Machinery Inc  
230 Industrial Parkway Branchburg, NJ 08876  
Phone: 908 707 8008 Fax: 908 707 0073  
info@siriusmachinery.com  
www.nordenmachinery.se



See us at **PACK EXPO Booth #N-4264**

## Your Products are in Good Hands

### Combined Top-Loading Case Packing and Palletizing Unit

- ▶ Case forming, top loading, sealing and palletization in a combined unit
- ▶ Fully automatic change overs
- ▶ Compact Footprint



▶ Case Packing ▶ Shrink-wrapping ▶ Palletization ▶ Conventional and Robotic Solutions



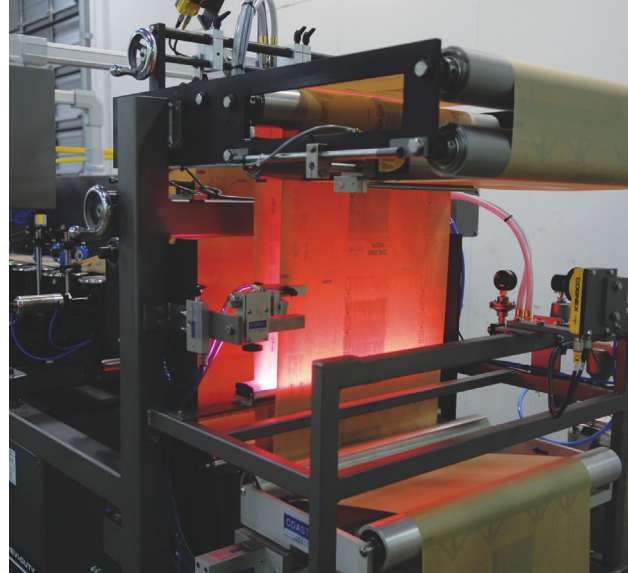
Whether it's a straightforward project or a custom design solution for complex projects, as an expert in end-of-the-line equipment, the **Cermex team** has the ability to successfully provide a solution to meet your needs.



www.cermexinc.com  
Tel.: (678) 221 - 3570







A vision system inspects the incoming film to ensure that the aluminum/polyester heating element (the square patch in the center of the film) is applied properly and that the glue is applied to the edges of the film.

popcorn bagging machines up and running quickly and on schedule for the customer.”

With its TwinCAT homework complete, Talon now will be able to start adding up the programming-time savings from the new system. “Previously, we had to spend considerable amounts of programming time with each new PLC or drive that we added,” Hohn says. “With TwinCAT and Beckhoff hardware, it’s now easier to program one central controller and conduct slight modifications as we modify our machine and add functionality.”

### No opportunity left unpopped

Within a three-month time window, Talon went from a new automation and motion-control platform specification to full controls design, received Underwriters Laboratory approval and completed all programming. “Equipping our machines with Beckhoff controls really became a win/win for Talon and our customers,” Hohn says. “We gave ourselves an aggressive timetable to implement a completely new controls platform, but with the help of Beckhoff sales and engineering support, we got it done. All of this work will pay off in the form of less expensive, repeatable machine designs well into the foreseeable future.”

“With the PC-based controls, we’re also seeing a higher degree of accuracy in our machines’ finished product,” Hohn continues. “The popcorn bags now have more precise cuts and have a more consistent length. We experience this improved performance, but we’re definitely not paying a price penalty for it. Talon’s controls cost about thirty percent less per machine than the previous PLC system.”

“We were also able to increase our free panel space by more than fifty percent,” Hohn says. “By doing

more control and communication with less hardware, Talon was able to make significant strides in wiring reduction, because we use a centralized controller, a bus-terminal I/O and TwinSAFE. We now wire directly into the I/O terminals without wiring through terminal blocks. They waste a large amount of panel space, and the time to wire them is a huge hidden cost.”

After focusing almost exclusively

on popcorn applications, which account for about 80 percent of its business, Talon has recently re-entered the bagged-snacks market with its revitalized standup pouch-packaging machines. “Talon plans on implementing Beckhoff as the complete control system for these machines too, so we can expect more significant savings utilizing PC-based controls in the future. We have also actively begun retrofitting

existing packaging machines with Beckhoff technology,” Hohn says.

#### More information is available:

**Beckhoff Automation,**  
952/890-0000.  
[www.beckhoffautomation.com](http://www.beckhoffautomation.com).  
**InduSoft,** 512/349-0334.  
[www.indusoft.com](http://www.indusoft.com).  
**Talon Mfg,** 952/471-9379.  
[www.talonmfg.com](http://www.talonmfg.com).



## Keep your Packaging Machines on the Cutting Edge

Solutions from SICK boost your packaging machines’ performance and maximize throughput, giving you a competitive edge. Backed by 60 years of expertise, we work with you to design flexible machine solutions that are cost-effective and easy to integrate.

From innovative safety solutions for your palletizers... to 3D vision for product inspection... to wash-down rated sensors for filling machines, our powerful automation solutions for packaging machine builders are designed to meet your needs today... and in the future.

Find out more at [www.sickusa.com/packaging](http://www.sickusa.com/packaging) or call 866-929-7491.

**Wash-down Solutions | Perimeter Guarding | Quality Control & Inspection**

**SICK**  
Sensor Intelligence.

Industrial Sensors • Safety Systems • Automatic Identification • Machine Vision





# Beer me that bobber

A Michigan startup uses its packaging line to produce **FISHING BOBBERS WITH FLAIR.**

**Tim Avery**, Assistant Editor

Steer clear of the beer, fishies. Newly minted Beer Can Bobbers are splashing into stocked lakes everywhere, thanks to an angler's inspiration and the efforts of packaging startup Shrink Pack Services.

Based in Kentwood, MI, Shrink Pack was founded last November by Bret Foster and Katie Unsworth, both employees with labeler **Forbes Co.** ([www.forbesdivision.com](http://www.forbesdivision.com)) According to Unsworth,

their entrepreneurial journey began two weeks after a shrink-sleeve-intensive PACK EXPO 2006, when she received a call from

at the time, but Unsworth and Foster visited Taft nonetheless to inspect his application, a fishing bobber with a miniature beer can replica.

"We were really excited when he showed us the project," says Unsworth. Taft's eureka moment reportedly came on a Sunday morning fishing expedition as he looked at discarded beer cans littering the lake. "Ultimately, either he needed to invest in equipment, or Bret and I could buy the equipment and start Shrink Pack," says Unsworth.

## From pieces to P-O-P packs

The production line in Shrink Pack's 5,000-sq-ft facility—which reportedly assembles and labels at 80

then passes through an Axon heat tunnel and has its label checked by another PresencePlus vision system.

The finished products are hand-packed into 36-count point-of-purchase displays sent to convenience stores and chains including Bass Pro Shops, MC Sports, Meijer, K-Mart and Wal-Mart Canada, and are priced at \$2.49 to \$2.99 per bobber. Seven styles are available: Miller Lite; Miller High Life; Miller High Life Light; Leinenkugel's Original; Leinenkugel's Light; Leinenkugel's Honey Weiss; and Leinenkugel's Berry Weiss.

According to Foster, Shrink Pack has produced and shipped 1.5 million bobbers since launching the line at the end of April. The Beer Can Bobber is planned as just the first in a series of Fun Bobbers, which in the future may include brands such as NASCAR and other beverages.

Shrink Pack doesn't plan to stop at bobbers, either. "We see ourselves as a contract packager," says Foster. "We can take our existing equipment and incorporate more things into it."

**We see ourselves as a contract packager. We can take our existing equipment and incorporate more into it.**

Advantage Plastics owner Anthony Taft inquiring about the technology. "He said, 'You're the only one I've talked to who knows what I'm talking about,'" she recalls. Forbes didn't offer shrink sleeves

parts/min—was built by **Criterion Manufacturing** ([www.criterionms.com](http://www.criterionms.com)) and **Blesco** ([www.blesco.com](http://www.blesco.com)). Three vibratory feeding hoppers send the three respective bobber components—cap, body and spring—down to a 12-cavity rotary dial that marries the parts together, spinning at 7 rpm. A PresencePlus vision system from **Banner Eng.** ([www.bannerengineering.com](http://www.bannerengineering.com)) verifies proper placement of the spring and reroutes defects to a reject station.

Each assembled bobber exits down a chute and into a floating puck, which carries it to an **Axon** ([www.axoncorp.com](http://www.axoncorp.com)) 130HS shrink sleeve to receive a label. The sleeves come gravure-printed from **SleeveCo** ([www.sleeveco.com](http://www.sleeveco.com)). Each bobber



## More information is available:

**Forbes Co.**, 800/250-4112. [www.forbesdivision.com](http://www.forbesdivision.com).  
**Criterion Manufacturing**, 616/784-3500.  
[www.criterionms.com](http://www.criterionms.com).  
**Blesco**, 616/977-3950. [www.blesco.com](http://www.blesco.com).  
**Banner Eng.**, 800/809-7043.  
[www.bannerengineering.com](http://www.bannerengineering.com).  
**Axon Corp.**, 919/772-8383. [www.axoncorp.com](http://www.axoncorp.com).  
**SleeveCo Inc.**, 800/624-0204. [www.sleeveco.com](http://www.sleeveco.com).



# Your sole contact for one stop packaging solutions



Today IMA SAFE is your single source for Packaging solutions, for simplified request procedures and even better client relations.

**Utmost quality is our trademark.** Expect operational excellence and the customary efficiency of our pre/post sales service.

**Packaging from beginning to end.** A full range of solutions and models for primary and secondary packaging requirements.



## IMA NORTH AMERICA, INC.

211 Sinclair Street • Keystone Park • Bristol, PA 19007  
Phone (215) 826-8500 • Fax (215) 826-0400  
sales@imausa.net

## NOVA PACKAGING SYSTEMS INC.

7 New Lancaster Road • Leominster, MA 01453  
Phone (978) 537-8534 • Fax (978) 840-0730  
novasales@imanova.com

See us at PACK EXPO Booth #S-1447

www.ima.it





Picking and palletizing 16 million cases/yr of chilled, frozen and sub-zero foods for retailers, VersaCold added 12 stretch wrappers that have improved traffic flow.

# Pallet loads get a wrap

VersaCold/Atlas, Modesto, CA, operates more than 120 modern, temperature-controlled warehouses across Canada and in the U.S., with a combined storage capacity of close to 502 million cubic feet. The busy Modesto VersaCold facility comprises 10,621,579 cu ft of freezer and refrigerated storage space, served by a 41-truck shipping platform and a 29-car private railroad siding. The facility's five buildings include 53 active dock doors through which pallets of product are arriving and departing 24 hours a day.

The facility receives, stores and distributes

Automated stretch wrappers deliver consistent, stable pallet loads that customers value. **FILM SAVINGS** more than pay for the machines.

refrigerated foods and frozen foods and "sub-zero" products like ice cream that require the lowest temperatures. Some of the facility's throughput is distributed in the same configuration in which it arrived, as stretch-wrapped full pallets are stored and then moved to trucks for distribution.

However, a significant portion of what passes through this busy warehouse operation involves picking product and building pallet loads to meet the needs of specific retailers. VersaCold reports picking and palletizing 16 million cases per year.

Stretch-wrapping those pallet loads for shipment at the same time that pre-wrapped full pallets move to waiting trucks on the same "busy street" has always been a challenge. Recently, VersaCold purchased 12 Packaging Flex LPD (Low Profile Deluxe) stretch wrappers from **Orion**. Continued on page 54

## SORT IT

### ProSort Series

- High Speed Sortation  
- get your product out quickly
- Smooth transitions  
- product sorted gently while continually moving forward
- Swift and Safe Sortation with ProSort Models

[www.hytrol.com](http://www.hytrol.com)

**HYTROL**

## Optimum Solutions For The Quality Control Of Flexible Packaging Products



We produce a whole range of testing instruments for the flexible packaging industry. We pursue technical innovation and conscientiousness. We have a talented team of expertise and dedication. Our distributors deliver professionalized technical support and quality customer services in your local region. We have more than three thousand customers and excellent reputation world-wide.

- ✓ Complying with ISO, ASTM, GB, and all other relevant standards
- ✓ Continuing technical support services ✓ Lower production costs
- ✓ Good price ✓ On time delivery

**Labthink®**

[www.labthink.cn](http://www.labthink.cn)

+86 531-85811021  
trade@labthink.cn



# Get Fit With **Diagraph**.

## Pack Expo Booth S-1912



Getting your business in shape by increasing throughput, reducing downtime, lowering operating costs. Just a few of the healthy benefits production lines gain with the athletic lineup of Diagraph's Get Fit Solutions.

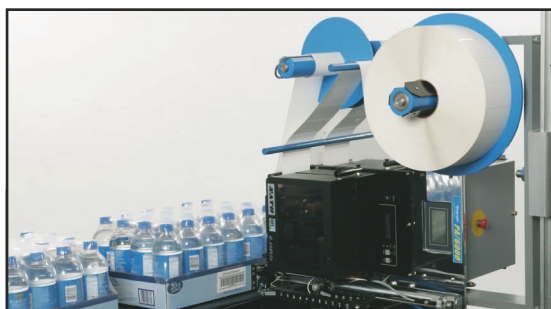
### POWER



#### New LINX 6900

Industry's best small character CIJ printhead has no moving parts, plus a complete auto-flush at shutdown. No clogged nozzles. The power of uptime is all yours.

### STRENGTH



#### New PA6000

High-performance, high-speed label print/apply, strong enough for harsh conditions and 24/7 operation. It's a lean, mean labeling machine that's all muscle.

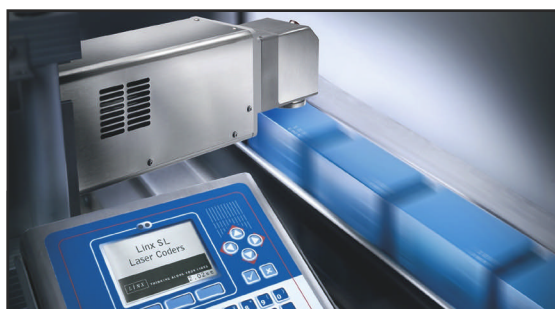
### FLEXIBILITY



#### New IJ3000 Controllers

XLS or ES Controllers with color touch-screen graphical user interface drive high-resolution impulse jet, integrated valve or waxjet printheads...whichever you choose.

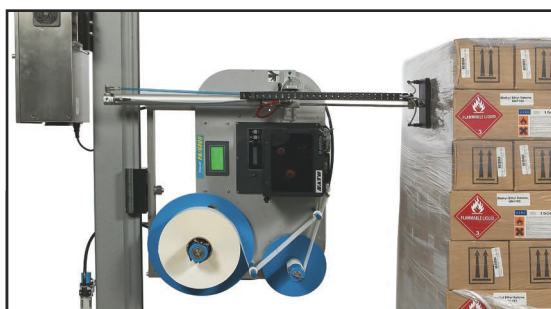
### SPEED



#### New LINX SL101 & SL301

Introducing LINX Laser Coders. Incredibly fast, indelible marking on chipboard, plastic, glass and more. Simple to install, simple to operate, simple to maintain.

### PERFORMANCE



#### New Pallet Labeling Solution

Track & trace pallets with Industrial PC-driven labeling system. ODBC connectivity to your warehouse management database. Label front, side or rear panels.

### VERSATILITY



#### New Printheads

On demand printing of bar codes, date codes, logos, graphics, nutritional facts, ingredients, product identification and more. Ingenuity and versatility at its best.

Next step...go to  
[www.diagraph.com/getfit](http://www.diagraph.com/getfit)  
for more information.

 **Diagraph**  
An **ITW** Company

800.722.1125  
[www.diagraph.com](http://www.diagraph.com)  
[info@diagraph.com](mailto:info@diagraph.com)



**Packaging** ([www.orionpackaging.com](http://www.orionpackaging.com)) that have improved traffic flow while at the same time improving pallet stability and appearance and significantly reducing film cost.

"In addition to the fact that they pay for themselves, the key to what makes these machines work for us is their small footprint," says Modesto facility general manager Robert Bascom. "Placed against a wall and

not requiring lots of floorspace, they don't interfere at all with product movement," he says.

### Outgrowing hand wrapping

In the 1990s, VersaCold Modesto installed four Orion stretch wrappers to wrap the pallet loads it built for customers. As the facility's operation continued to expand, it outgrew the capacity of these wrappers, which

were supplemented with hand-held stretch film applicators.

"Adding hand wrappers was the result of both our growing volume of throughput and the configuration of our work areas," Bascom points out. "Those large turntable wrappers did the job they were purchased for, but waiting lines would build up because the volume of pallets coming out of our warehouse was

## Panasonic ideas for life

# CO<sub>2</sub> Laser Markers

High Performance  
LP-400 series from **SUNX**



PET resin with little burning  
at a 9.3µm wavelength



Up to 200mm x 200mm marking  
area for product packaging



Precision coding and scoring  
in high-speed environments

**SUNX** is a brand of Panasonic

Panasonic offers an array of products to fit your packaging applications:



**New!**  
Digital Pressure Sensors  
DP-100 (self-contained)  
DPC/DPH (amplifier separated)



Programmable Logic  
Controllers  
FP-X series (brick style)  
FPΣ series (micro)  
Impulse heat controller



AC Servo Motors  
Realtime Express Network

1.877.624.7872  
[pewa.panasonic.com/pd08](http://pewa.panasonic.com/pd08)

See us at PACK EXPO Booth #E-7906

**Panasonic**  
Panasonic Electric Works Corp. of America



so large," he recalls. The automatic wrappers were also installed in the area where the pallets were being moved to the truck dock. "The flow of pallets and the waiting lines created a bottleneck in the traffic

## The machines are very easy to use — a pushbutton operation.

pattern that was more a function of the plant layout than the wrappers' capability," Bascom relates.

Employees were able to hand wrap loads as quickly as a machine could, but VersaCold found that the fatigue factor involved with continuous hand wrapping, as well as occasional back injuries led to slowdowns. More important, manual wrapping produced less secure pallets and used more film.

"With automated wrapping, customers receive a consistent, secure pallet," Bascom says. "The chance of items falling over or collapsing is essentially gone."

## Eliminating the bottleneck

A significant advantage of automatic stretch wrapping is that it significantly stretches the film as it is applied. Orion Packaging pre-stretch automated wrapping equipment stretches the film as much as 260 percent as it wraps, and in a busy warehouse such as VersaCold's Modesto operation, the film savings alone can quickly pay off the investment.

"That 260-percent stretch is standard on the wrappers," says Bascom. "We don't have to adjust





Twelve new pallet wrappers were installed at Mosesto in February 2008. Each can handle a 5,000-lb load at speeds of 15 rpm.

anything to get that savings.”

In the past, with the increasing flow of pallets and the number of people VersaCold had ticketing items, pulling cases and wrapping pallets, there was no way every pallet could be wrapped with the existing machines,” says Rob Shoemaker, director of Orion Packaging’s Western Region. “They decided to place a wrapper by every dock door, or between adjacent doors where they’re convenient.”

So VersaCold located its 12 new Orion automated stretch wrappers, installed in February 2008, closer to the sidewalls rather than in the middle of traffic areas.

**The wrappers don't interfere with the movement of pallets to waiting trucks. In the past, a bottleneck that interfered with traffic would cause workers to bypass the wrapper and manually wrap.**

It also removed part of the dock floor and created pits that placed the wrappers’ turntables level with the dock floor, to facilitate moving loads on and off the turntables.

“The new wrappers do not interfere with the movement of pallets to waiting trucks,” says

Bascom. “In the past, a bottleneck that interfered with traffic would cause workers to bypass the wrapper and manually wrap. Savings in film were lost, and savings we got from the automatic wrappers were eaten up by labor costs.”

During the equipment installation, warehouse operations continued. VersaCold simply roped off areas one at a time, while the rest

of the facility kept the pallet loads moving.

### Stretch-wrapper operations

“The machines themselves are very easy to use—a pushbutton operation,” says Bascom. “Orion provided training, but it was primarily focused on safety training in how to place a pallet and wrap it.”

The LPD stretch wrapper can

handle a maximum load of 5,000 lb at speeds of 15 rpm, which results in a 65-sec wrap for a standard load and up to 90 sec for a tall load.

The LPD has an infrared sensor that automatically detects the height of the load being wrapped as it moves up and down during the wrapping process.

VersaCold also chose an option Continued on page 56



Drop In &  
See Us at  
Pack Expo  
Booth N-3731

## Some things need to be done right the first time.

Launching a 6-way RW formation out of the back of a Caribou at 15,000 feet requires assembling a team with the right expertise and trusting in that team to perform. It also requires that your team is committed to doing it right the first time.

**FOX IV** has provided **turnkey automated labeling systems** for more than 25 years. From steel mills to automotive plants to meat-processing facilities, our labeling systems operate in some of the most harsh and unforgiving industrial environments in the world.

We understand the risk FOX IV customers take when ordering an integrated solution. We understand their concern if responsibility for system performance is divided among a number of companies. That is why we have assembled an in-house team with the technical and project-management expertise to provide turnkey solutions. **Responsibility for total system performance rests with us.**

We also understand the importance of supporting our equipment after the sale. Our global customers often operate around the clock in different time zones. **FOX IV keeps them running** with 24/7 technical support, PMMI-certified trainers, Internet monitoring and trained service technicians. At FOX IV, we are committed to doing it right the first time, and the reason we can say we understand this level of commitment...our president is in the photo.



Equipment • Integration • Service • Supply

We Solve the Tough Ones ... Globally

**WWW.FOXIV.COM**

**1.877.436.2434**



## With automated wrapping, customers receive a secure pallet.

that gave it the tallest wrapping arm, which allows it to wrap the tallest pallet load it might encounter.

The wrapper's 63-in.-dia turntable can accommodate loads up to 55x55 in. The loads are delivered by forklift to VersaCold, but are equally

accessible with a pallet jack or an electric "walkie."

### Film savings

VersaCold leases its wrappers, primarily so that it has the option to replace them with new equipment

every five years. Even including leasing costs, the company realizes substantial savings over earlier film costs. It also chose an option offered by Orion that lets it use a wide, 30-in. film wrap size rather than the standard 20-in. width, which means fewer revolutions for the wrapper, saving even more film.

One tool that convinced Bascom to make the move to the pallet

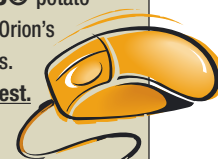


The new wrappers fit in well with the Modesto operation and prevent traffic bottlenecks of the past. They're also easy to use.

wrappers was a cost analysis presented by Orion that showed in hard numbers what the savings would be.

"In the past, we were spending \$145,000 annually on hand wrap film alone, plus what we spent on machine wrap film," reports Bascom. "Today, our annual machine wrap film costs are going

Find out how production jumped 52 percent on loads of **PROCTER & GAMBLE'S PRINGLES®** potato chip canisters, wrapped on Orion's automatic stretch wrappers. Go to [www.packagingdigest.com/pringles](http://www.packagingdigest.com/pringles)



to be \$65,000 to \$70,000. Even factoring in the annual lease cost of \$37,000 for the machinery, we are still saving about \$40,000 on the overall cost of wrapping pallets. That means a twenty-nine-percent cost reduction."

Customers, Bascom reports, love the result. Pallet loads arrive in stable condition, they have a professional appearance and are easy to handle and unload, he says.

"Our larger customers may have as many as 120 stores in their chains, which could translate into 120 sources of complaints," he summarizes. "But everybody down the line reports being pleased."

More information is available:

Orion Packaging, 800/333-6556.  
[www.orionpackaging.com](http://www.orionpackaging.com).

## April 2008 – Multivac Completes Launch of New Thermoformer Generation

*Sets New Standard in Sanitary, Ergonomic Design*

KANSAS CITY MO – Packaging equipment leader Multivac, Inc. has introduced the most advanced...



**TRADE-IN PROGRAM**

**Upgrade to the New Generation of Multivac Thermoformer Technology, and we'll BUY BACK your Old Multivac!**

Now there's no reason not to **KEEP** owning the best.

Multivac believes every product deserves the absolute best in reliable, safe and sanitary packaging. We've already told you how our new generation raises the bar in a host of critical areas. Now, we're putting our money where our mouth is.

Buy a new generation Multivac thermoformer, and we'll buy back your old one — regardless of age or condition. Sound simple? It is.



**MULTIVAC**  
BETTER PACKAGING

800-800-8552  
[muinc@multivac.com](mailto:muinc@multivac.com)  
[www.multivac.com](http://www.multivac.com)





Each pail is coded according to EPA regulations before leaving Bell Laboratories' plant in Madison, WI.

ink-jet coding

# Test codes

Bait manufacturer Bell Laboratories gives a prototype **INK-JET CODER** a real-world test on pails.

**Linda Casey**, Associate Editor

Bell Laboratories Inc., Madison, WI, manufactures a variety of rodenticides and rodent-control products for the consumer, professional pest-control and agricultural markets worldwide. In a typical eight-hour shift, the company can produce up to 12 tons of bait boxes—a popular rodent-control product often distributed in farm and home-improvement stores.

Tomcat All-weather Bait Chunxs, one of the company's more than 500 products, is sold as 1-lb bars and in 4-lb plastic pails at Blain's Farm & Fleet stores in the Midwest. Tomcat is a mold- and moisture-resistant bait, formulated to attract both rats and mice with patented gnawing edges and kill them in four to six days using an anti-coagulant.

Because the product contains a poison, albeit a small amount of poison—Tomcat has just 0.005-percent of diphacinone, the U.S. Environmental Protection Agency (EPA) requires Bell Laboratories to code each pail in case of recall. To help the agency identify the point of manufacture, Bell Laboratories codes all rodenticide packaging in accordance with EPA rules. The codes also help Bell Laboratories conduct its own internal quality-control processes.

## A cat in gloves catches no mice

The company has long used **Videojet** ([www.videojet.com](http://www.videojet.com)) printers to code its containers. Bell Laboratories owns three Videojet 43s models, and the bait manufacturer also has been alpha- then beta-testing the Videojet 1510 small-character continuous ink-jet coder since February 2008.

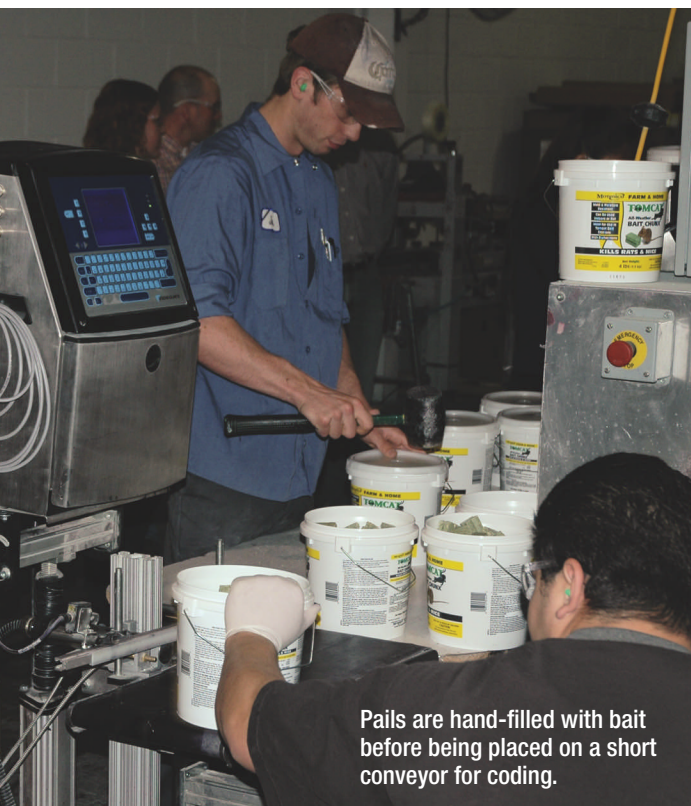
By participating in the testing program, Bell Laboratories gets free use of the machine and is provided with the necessary supplies, such as the ink cartridges. In exchange, Bell Laboratories provides feedback to Videojet about the coder's

**For Bell Laboratories, the advantages of participating in the product-testing program greatly outweigh the potential negatives.**

performance in a rather hostile environment.

"Videojet approached us [about testing the 1510], and the reason they came to us is because of the factors in the plant," Bell Laboratories manufacturing manager Dan Hineline explains. "They felt we would be a very good challenge for the machine, and we are."

Bell Laboratories' rodenticide formulations use  
Continued on page 58



Pails are hand-filled with bait before being placed on a short conveyor for coding.

**No Dust.  
No Gas.  
No Odor.**

## New Digital Controls

Digital control panel

Large capacity self-cleaning, pleated dust-bag

High visibility status indicators

Integrated electronic gas sensor

Variable speed digitally controlled blower

2 Year standard warranty



## Laser Fume Extraction

Engineered for effective capture of laser generated contaminants

Protects equipment and operators from harmful pollutants

Effective for laser marking, cutting, welding and engraving

Preferred by major O.E.M. and laser users

**Fumex®**

**Air Filtration Systems**

**Toll free: 800.432.7550**

**[www.fumexinc.com](http://www.fumexinc.com)**



human-food-grade ingredients, many of which can be very powdery. The dust from these powdery ingredients can lead to printhead clogs.

To ensure the manufacturing and packaging output closely matches its customers' current needs, Bell Laboratories uses a just-in-time order fulfillment process instead of requiring customers to buy from existing inventory. Therefore, manufacturing and packaging

line equipment must not only be able to handle high volume but also must be able to start right up after sitting for extended periods of time. "At times, we would shut it off for an extended period of time and not use it, which is a real challenge for a coder," says Hineline. "Can it start right up when it sits for a day or two? Can it start right up when it sits over the weekend? These were the types of things that were ongoing issues for us, so we



Depending on the day, Bell Labs runs up to 15 production lines of different products, including bait blocks, bait stations and mouse traps.

were an ideal testing facility from that standpoint."

### **Temptingly lethal**

On some days, Bell Laboratories runs up to 15 production lines of different products from bait blocks to bait stations to mousetraps. On the bait block line, a giant blender mixes ingredients that include human-food-grade products, such as flour, sugar, oats and even butter pecan flavoring. The mixture is sent through one of Bell Laboratories' two cold-extrusion lines, then placed on a cooling conveyor, which moves the bait to the filling area. There, an operator manually fills decorated number-two plastic pails and visually measures the amount of bait needed. The operator places the filled pail on a mobile conveying cart, where the packaging is coded. An operator then puts four pails into a master carton, which come preprinted from **Menasha Corp.** ([www.menasha.com](http://www.menasha.com)). The carton is sealed manually.

### **From two to many**

While this setup allows Bell Laboratories to have multiple production lines that are fed from the same core machinery, it also presented Videojet with challenges even before the 1510 was installed.

"We kind of have a homemade conveyor system that works very well with the way that we do production work in our plant," Hineline explains. "It's a really compact unit that we're quite proud of. The structure is made out of **80/20** ([www.8020.net](http://www.8020.net)). It's an extruded aluminum that's kind of like an adult erector set. You buy these components, and they bolt together really well. It's a very versatile material. Then we have **Dorner conveyors** ([www.dorner.com](http://www.dorner.com)), which are high-end conveyors, on the carts. It's a very

Pack Expo  
Booth S-1791  
PMA Fresh Summit  
Booth 1385

## **We Get Wrapped Up...**



## **In Our Clients' Business.**

- Environmentally Friendly
- Consistent Quality
- Recyclable
- Technologically Advanced

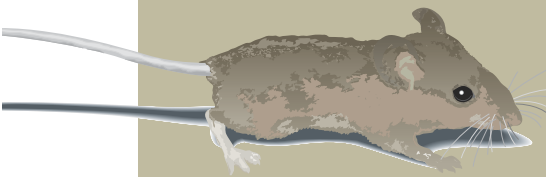




short, little conveyor. The whole thing is small, and it's on casters."

Because the carts are not standard equipment, Videojet engineers needed to find a way to integrate the coders onto this small space securely.

## Did you know?



- According to the **University of Michigan Museum of Zoology Animal Diversity Web** (<http://animaldiversity.ummz.umich.edu>), rodents are the largest order of mammals with more than 2,000 living species in 30 families. Despite all their diversity, rodents share one common characteristic—their dentition is specialized for gnawing. During gnawing, a rodent's incisors grind against each other, which essentially self-sharpen the teeth.

- Rodents have even infiltrated the World Wide Web. Remember Hampsterdance? According to The Hampster Dance page in **Wikipedia** ([en.wikipedia.org/wiki/Hampsterdance](http://en.wikipedia.org/wiki/Hampsterdance)), Deidre LaCarte launched the Internet phenom in 1998. Hampsterdance is a Web page that contains four animated GIFs of hamsters repeated several times and a loop of background music, which at that time was a relatively new browser feature.

- On January 16, 2008, **National Geographic News** (<http://news.nationalgeographic.com>) reported that a bull-size rat was identified from a well-preserved skull. The mega rodent is believed to have lived in the lowland rainforest of South America between 2 and 4 million years ago and to have weighed approximately 2,200 lbs.

- In 1952, the **International Herald Tribune** ([www.ihf.com](http://www.ihf.com)), published a news item about how a rat indirectly caused an explosion that injured six people and broke hundreds of windows in the village of Sparreholm, Sweden. According to the brief, E. Elmwall, owner of a repair shop, found a rat hiding behind the cushions of his car. When he could not reach it, he decided to kill it with gas. The car exploded. Six men were injured, two of them seriously. No trace of the rat was found.

"That's something that they needed to come back and forth a few times before they actually had it right," recalls Hineline. After some trial and error, the Videojet team did create mounting plates that would keep the coder secure during the frequent moves. "This Videojet doesn't get to stay in one place very often," Hineline comments. "It gets rolled off, then we change the line over and

it gets rolled back in place."

## Reducing downtime

Depending on a specific customer's needs or changes in orders, the codes imprinted on the packaging also change several times throughout a day. The prototype features a new user interface (UI), which is designed to be easy-to-learn. "The UI is very similar to the

unit that we had in house so our operators didn't have a hard time learning it," says Hineline. "Only, Videojet improved it: They've gotten rid of some of the quirks."

Overall, Bell Laboratories says the simpler UI has resulted in reduced downtime. Because every manufacturing employee can use the printer, production line workers can

Continued on page 60



1-800-SMC-SMC1

# SMC PROVIDES THE COMPLETE PACKAGE



- **Energy Savings Program / On-Site Audit**
- **Global Support / Local Inventory**
- **Engineering Solutions**
- **Downloadable 2D and 3D CAD Drawings**
- **ROHS Standard Compliant Products**
- **Training Centers and On-Site Instruction**
- **Static Discharge Elimination**
- **World Standards Compliant**



**See How SMC Can Give You A Competitive Advantage  
For Your Market At Pack Expo, November 9 - 13,  
at McCormick Place in Chicago.**



WWW.SMCUSA.COM





change roles or the printer can move to different lines in the facility easily.

To help operators with varying skill levels replace inks, the Videojet 1510 Smart Cartridge uses a microchip that identifies when the correct ink has been installed.

The printer itself experiences very little downtime. In Bell Laboratories' experience with other ink-jet coders, operators would clean the printhead at least once in every shift, which

could add up to 30 minutes every day. The 1510 printhead is designed to stay clean and automatically adjust to changes in the environment.

In the bait manufacturer's experience, the 1510 printer can be run around the clock or remain idle for several hours while employees do other jobs. The printer also has a sleep mode, so it does not have to be restarted after every idle period.

The 1510 is designed to run for

9,000 hours, which can be up to 18 months of operation in typical applications, before requiring preventive maintenance. Operators receive an alert when it's time for a new "core," which consolidates filters, valves and the pump into a single unit. As of press-time, Bell Laboratories was preparing for the printer's first core replacement. According to Hinline, the printer shows no signs of needing a new core



According to Bell Laboratories' manufacturing manager Dan Hinline, the new user interface (UI) is much better than the UI used for the manufacturer's older coders.

but Videojet wants to be proactive in seeking potential problems during this testing phase.

### Testing has its advantages

While Hinline did not disclose any major problems uncovered during the testing, he did say the testing did uncover a minor problem. One of Videojet's goals is to create a printer with no recessed areas that can trap fluid. During testing, an intermittent problem came up that the Bell Laboratories staffers weren't able to resolve. The testing uncovered a hidden cavity where ink can collect. The Videojet technician servicing the prototype machine was able to quickly fix the problem by turning on a feature on the machine, and the machine has worked well since then.

Hinline does say that small problems like this are not major issues for Bell Laboratories. "In terms of that, those little things are always going to happen [during testing], and there was very good resolution of the problem," he remarks.

A Videojet technician checks on the machine every Thursday, and Hinline says it's not unusual for the technician to come more often. Therefore, Hinline says the advantages of participating in the product-testing program greatly outweigh the potential negatives for Bell Laboratories.

"The type of development Videojet is doing is the kind of development that would make the 1510 a better piece of equipment for me," he explains. "My objective is to help them with this, and I can use this type of equipment if it's good."

ASME/ANSI | Attachment | Corrosion Resistance | Lube Free | Plastic | Custom/Specialty

More solutions

More selection

**Tsubaki:** The choice for chain™

**Now available!**

New Tsubaki Gripper Chain™



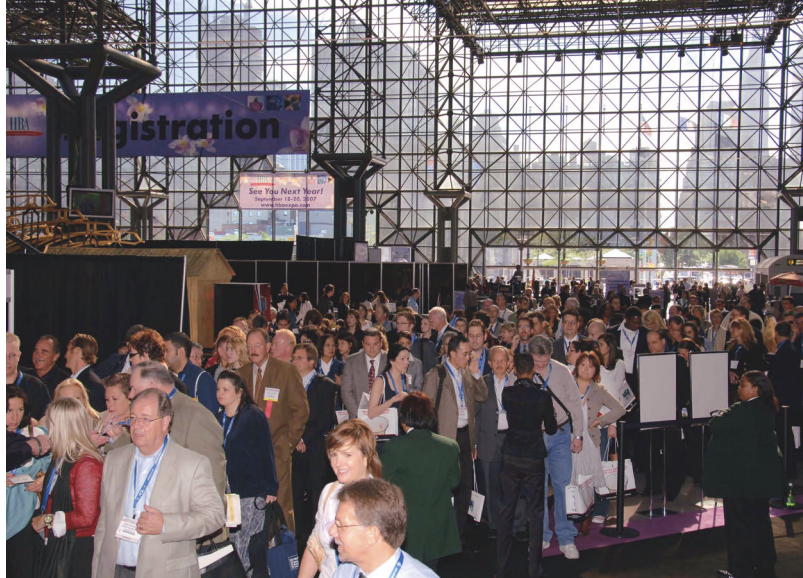
**TSUBAKI**

U.S. Tsubaki, Inc.  
[www.ustsubaki.com/pdm](http://www.ustsubaki.com/pdm)  
800-323-7790

#### More information is available:

Videojet Technologies Inc.,  
800/843-3610.  
[www.videojet.com](http://www.videojet.com).  
80/20 Inc., 260/248-8030.  
[www.8020.net](http://www.8020.net).  
Dorner Mfg. Corp., 800/397-8664.  
[www.dorner.com](http://www.dorner.com).  
Menasha Corp., 800-558-5073.  
[www.menasha.com](http://www.menasha.com).





# Beauty in a box

HBA Global Expo returns Sept. 9 to 11 to grace the Big Apple with **EXHIBITIONS AND SEMINARS GALORE.**

## Tim Avery, Assistant Editor

Since 1993, the HBA Global Expo has targeted the marketing and technical needs of the cosmetic, fragrance and personal care industry. At least 600 exhibitors and more than 17,000 attendees are expected to gather at the Jacob K. Javits Convention Center in New York City for this year's show, Sept. 9 to 11.

"We are the only industry event that covers the entire product development process, from formula to finish," says Annie Scully, public relations consultant for HBA. One topic of emphasis this year is the latest developments in naturals, organics and sustainability. Dr. Nicholas Perricone, M.D., FACN, will deliver the keynote address, "Strategies

for Understanding & Reversing the Inflammation-Aging Connection."

More than 50 sessions with 200 speakers are scheduled. Packaging-related programs include: Sustainable Packaging Initiatives, Tuesday, Sept. 9, 10:30 a.m. to noon; Make Your Packaging a Supermodel that Gets in Every Magazine: Top Editors Tell You What They Are Looking For, Tuesday, 2:30 to 4 p.m.; Labels: What the Outside Says About the Inside, Wednesday, 9 to 10:30 a.m.; and Contract Packaging: The Do's and Don'ts, Wednesday, 3 to 4:30 p.m.

## Innovations showcased

New this year in the New Product Innovations Showcase is "Innovative Trends," featuring product

tastings and samplings to enhance development. The Presentation Theater returns for 2008 with side-by-side comparisons of exhibitors' products.

More than 650 industry executives are expected to show for Tuesday's HBA Industry Awards Dinner 2008 at the Marriott Marquis, where individuals and research and development teams will be feted for recent innovations. Tickets can be purchased as part of the show registration. To reserve a full table, contact Barbara Wheat at 609/759-4732 or bwheat@hbaexpo.com.

The following day features the International HBA Safety, Regulatory and Certification Summit, with a panel of 15 cosmetic industry experts that will focus on certified organic regulations.

Register for the show at [www.hbaexpo.com](http://www.hbaexpo.com).

## Industry proven adhesion test results

With our industry proven test platform, the Adhesion Release tester, and our widely acclaimed EZ Lab System software you can:

- test a wide variety of adhesives at various angles.
- download data on EZ Lab System software to view test results quickly and easily.
- easily graph multiple test results for direct evaluation and comparison.

To keep yourself on track, visit [www.cheminstruments.com](http://www.cheminstruments.com), or call 513-860-1598 today.

**ChemInstruments**  
A ChemSultants International Company



## Who found the defect? You or your customer?

**ELIMINATE LEAKERS, UNDERFILLS & OTHER DEFECTS** from your production line and protect your brand image.

### TapTone Package Inspection Systems:

- 100% inspection at full line speeds
- Inspections include leak detection, fill level inspection, cap inspection, label detection, and tamper band detection
- Case inspection systems and rejectors also available

**Call today and speak with our package inspection specialists to find the system that's right for your production line.**

### TapTone Offers:

- Free product evaluation
- Custom configuration of your TapTone system
- Telephone and on-site service and support

**Visit us at  
Pack Expo Chicago  
Booth #S-1575**



**TELEDYNE TAPTONE**  
Package Inspection Systems  
A Teledyne Technologies Company

508.563.1000 • [www.TapTone.com](http://www.TapTone.com)



# sustainability

One thing I learned while on vacation: if you want an incredible amount of press coverage, redesign a milk jug. The newly released square milk jug and the consumer response to tilt-and-pour versus lift-and-pour were remarkable. It's an eloquent example of the tension that can result when the economic and environmental benefits of a package redesign are invisible to the consuming audience whose main concern relates to pouring milk at a reasonable price. However, we have conquered Windows™, cell phones and ordering "skinny" venti lattes. I am

more environmentally responsible packaging. What struck me was that retailers often don't have the in-house technical packaging or environmental expertise to evaluate possible environmental issues related to a package redesign. As a result, they often look to their supply chain partners to play a role in helping to provide this expertise—for better or for worse.

One thing is clear: Retailers react quickly when consumers take the time to complain. However, reacting without a clear understanding of the trade-offs implicit in a decision may end up creating

address. Next, it's critical to understand the trade-offs associated with a material selection and to understand what issues you are choosing not to address. This includes thinking about any unforeseen consequences. It's rare that a material wins across all of the environmental considerations.

Oxodegradable and oxobiodegradable additives for plastics have further complicated the paper-versus-plastic issue. Differences between these additives are clouded by a lack of understanding on what "degradable" versus "biodegradable" means; as well as concerns about the chemistry of the additives or of the consequences of the accumulation of plastic shards in the environment related to oxodegradables and questions about the ultimate biodegradability of oxobiodegradables as they typically don't meet compostability standards.

From a sustainability perspective, you need to consider whether a material decision supports your strategic vision or is a tactical, near-term response that may not align with this vision.



## Sustainable solutions require trade-offs

confident we will conquer tilt-and-pour.

Interestingly, it was surprising to members of the press when it was mentioned that the milk jug redesign was not novel, but was simply a very public and iconic example of what some members of the packaging industry have been working on for several years—packaging redesign for more efficient use of materials, energy and recyclability.

No place is the potential for this tension greater than the world of retail. Participating in a retailer conference recently, I heard several examples of both successful and unsuccessful attempts to introduce

a different set of unintended consequences. The paper-versus-plastic-bag debate comes to mind and is an issue where retailers and politicians are feeling the heat to take action. Is there a right or wrong answer? It depends on what you care about.

In trying to decide which material is preferable in an application from an environmental perspective, it's critical to have a clear understanding of the environmental issues one values and wants to

*Anne Johnson is the director of the Sustainable Packaging Coalition, a project of GreenBlue ([www.greenblue.org](http://www.greenblue.org)). For additional information, email [info@sustainablepackaging.org](mailto:info@sustainablepackaging.org).*

## DESICCANT BAGS

**Our entire line of desiccant products are available for immediate shipment at substantial savings to you!**

- Outperforms other desiccants
- Large and small orders welcome
- Completely safe and non-corrosive
- Includes humidity indicator cards
- Call for technical assistance
- FREE brochure

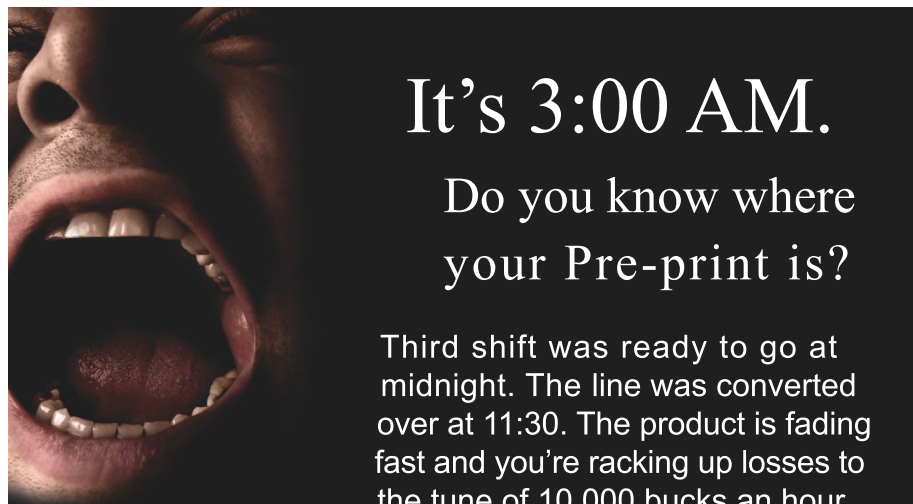


**W.A. Hammond  
DRIERITE Co., Ltd.**

P.O. Box 460, Xenia, Ohio 45385

937-376-2927 • FAX 937-376-1977

[www.drierite.com](http://www.drierite.com)



## It's 3:00 AM.

### Do you know where your Pre-print is?

Third shift was ready to go at midnight. The line was converted over at 11:30. The product is fading fast and you're racking up losses to the tune of 10,000 bucks an hour because you can't find the Pre-print. Sound familiar?

Iconotech has a better way. Nothing kills a production line quicker than a good old-fashioned Pre-print hunt. With a Generic Case Printing Program and an Optimizer Case Printer from Iconotech all this just goes away. You print what you need when you need it from a simplified Generic inventory. It couldn't be easier.

Making the switch to Iconotech can save you hundreds of thousands of dollars a year, simplify logistics, eliminate scrap and obsolescence and improve your environmental footprint. Iconotech's plateless technology is fast, flexible and lets you print your own Pre-print for pennies. To find out more, contact Iconotech at [www.iconotech.com](http://www.iconotech.com) or give us a call at 800.521.0194.



**iconotech**

the only name in generic case printing

See us at PACK EXPO Booth #S-3033



# Winning Solutions at Every Turn!

**The most dynamic combined exhibition of commercial printing, flexible packaging, converting, folding/gluing, die-cutting, tag/label production equipment, substrates and supplies in the Americas this year!**

- Explore acres of "live" running applications demonstrating the newest equipment you need now
- Discover the hottest new business solutions for printing, converting and manufacturing packages that will boost your profits today — and tomorrow
- Learn something new — educate your entire team — nearly 70 dynamic seminars taught by top industry experts
- Network with your peers in other print industries to gain their "secrets" for improving print quality that will maximize your customers' marketing efforts

**GRAPH EXPO® —  
The Complete Package**

**GRAPH  
EXPO®**

October 26–29, 2008  
McCormick Place South • Chicago, IL

**REGISTER TODAY!**  
**[www.graphexpo.com](http://www.graphexpo.com)**



**Graphic Arts Show Company**  
**(703) 264-7200**



# system integration

Many automation vendors not only offer the hardware and software products needed to automate a packaging facility, but the design and implementation services as well. For particularly large projects, a vendor sometimes serves as the main automation contractor (MAC), providing certain system integration services themselves and contracting for the rest with other service providers including other system integrators.

According to a Frost & Sullivan report, "Main

## Automation contractors versus system integrators

Automation Contractors: Transforming the Automation Supply Landscape?" ([www.frost.com](http://www.frost.com), Feb 19, 2008), the MAC concept originated back when engineering, procurement and construction (EPC) firms were responsible for the entire lot of front-end engineering and design, detailed engineering design, procurement of systems and final construction—automation and all. An EPC company would procure the required automation equipment separately and then install it.

More recently, however, the MAC concept has developed to give the automation vendor supplying

those products earlier and greater involvement in the actual execution of the project. According to Frost & Sullivan, "The automation vendor now assumes the responsibility of coordinating the activities among the small suppliers, system integrators and the end user.

"As the MAC is more actively involved in the project, this can result in greater cooperation between the MAC and the end user, bridging any gaps that exist when EPC companies hold greater responsibility in projects." This leaves the EPC free to concentrate on the big picture, including construction of the facility in which the automated packaging line is to reside, installation of the required utilities and implementation of the packaging line itself. But this adds to the cost of additional personnel and technical resources that the automation vendor must devote to the project.

On the other hand, automation vendors claim their involvement as MACs reduces capital and operating expenditure by generating a net reduction in project costs, bringing the system online faster and optimizing its performance and reliability. After all, they argue, it's generally more economical to involve subject-matter experts early in the design of any project than to spend

time fixing preventable mistakes down the road. System integrators earn their keep by engineering automation systems with other vendors' products. They argue that they, too, provide accurate estimates and cost controls, select appropriate equipment, integrate the equipment with the process to be automated and do it all at a fixed price. They can do this using any vendor's products—whatever works best and costs least.

Automation vendors counter that most system integrators lack the experience and financial wherewithal to serve as the MAC for large-scale automation projects. And it's true that more than half of the system integrators listed in the *Packaging Integrator Guide* report annual revenues of less than \$5 million. Apparently, the best choice for automation projects remains subject to debate.

Consulting Editor Vance J. VanDoren, Ph.D., P.E., contributes articles on process control, advanced control and systems integration and edits *Control Engineering's* and *Packaging Digest's* annual *Automation Integrator Guide*.



# TRONICS®

ADVANCED LABELING TECHNOLOGY

### Key Features

- Rapid tool-less changeovers
- Synchronized stepper motors to all drives
- Graduated quick reference adjustments
- Touch pad controls with 100 job memory
- Modular design field upgrade ready
- Labelers in stock
- Specialty Pressure Sensitive Label Applicators

### Series 3 Labeling System



**Additional Equipment:**  
Stand Alone Labelers & Print & Apply Applicators

**866.464.9339**

[www.TronicsAmerica.com](http://www.TronicsAmerica.com)  
[sales@TronicsAmerica.com](mailto:sales@TronicsAmerica.com)  
1430 E. 86th Place Merrillville, IN 46410

# GARVEY®

Solution #36  
CORPORATION

## Small Products At High Speeds While Reducing And Enabling

- Product Contact
- Down Products
- Backpressure
- Gapping

- Increased Thruput
- Accumulation
- Multi-Laning
- Single Filing



0.58"



Come visit us at  
PackExpo 2008  
Booth N4021

**INFINITY**  
International & Domestic  
Patents Apply

208 South Rt. 73, Blue Anchor, NJ 08037  
Phone: 1-800-257-8581 Email: [infinity@garvey.com](mailto:infinity@garvey.com)

[www.garvey.com](http://www.garvey.com)



# newsmakers

## MOVERS & SHAKERS



Kim Markovich  
Vits America

**Vits America** names **Kim Markovich** East Coast regional sales manager and **Nick Gerovac** director of international sales and marketing. **NatureWorks**

**LLC** names **Marc Verbruggen** president and CEO.

**Smurfit-Stone Container Corp.** names **Kevin Rauber** vp and general manager and **Anthony Dilenno** vp, both of national accounts for its recycling division.

**Standard-Knapp** appoints **David Anderson** director of engineering.

**Ideal Manufacturing & Sales Corp.** names **Terry Grunke** service manager of its manufacturing team.

**Williamson Corp.** appoints **William Foran** director of sales.



Jean-Guy Delage  
OYSTAR Erca-Formseal

**OYSTAR** names **Jean-Guy Delage** managing director as well as head of its dairy division. **Clariant** appoints **Peter**

**Prusak** head of its North American packaging market segment, with responsibility for sales, marketing



Peter Prusak  
Clariant Masterbatches

**Meerfeld** acting CEO.

**Tom Osborne** joins investment banking firm **Grace Matthews, Inc.** as a coatings and specialty chemicals expert.



Dan Throne  
Bosch Rexroth Corp.

**Bosch Rexroth Corp.** names **Dan Throne** sales and marketing manager for its Electric Drives and Controls Div. **Motoman Inc.** names **Tom Bryant** vp,

standards and logistics group.

**Flint Group** announces that **Dave**



Dave Frescoln  
Flint Group

**Frescoln**, deputy chairman, plans to retire from the co.

**Seegrid Corp.** names **Jack Antounian** vp of operations, **Michael Clark** director of

and product development; he remains director of market development. **InkSure Technologies Inc.** appoints **Philip Getter** chairman of the board and **Yaron**



Kojiro Maeda  
Toray Plastics (America) Inc.

engineering and **Domenic Niro** director of sales. **Toray Plastics (America), Inc.** appoints **Kojiro Maeda** chairman of the board. **Container Management Systems, LLC** appoints **Judy Nabers** CFO.



Judy Nabers  
Container Management Systems, LLC

**Owens-Illinois, Inc.** names **Jay Scriptor** vp of sustainability. **Eriez Magnetics** names **Andy Lewis** vp—international and **Paul Fears** managing

director, Eriez-Europe.

**Control Technology Corp.** appoints **Tom Schermerhorn** president.

**Sandvik Coromant** promotes **Robert Page** to productivity center manager for its new Schaumburg, IL facility.

**Bosch Packaging Technology** names **Pres Lawhon** president and general manager of Doboy, Inc.

**Menasha Packaging** names **Dennis Bonn** vp of marketing.

**Eastman Chemical Co.** appoints **Damon Warmack** vp/general manager, Performance Chemicals and Intermediates, and **Brad Lich** vp/general manager, Coatings, Adhesives, Specialty Polymers, Inks.

**The American Iron and Steel Institute** appoints **Thomas Gibson** president and CEO, effective Sept. 1.

**Motoman Inc.** names **Steve Barhorst** president and CEO.

**Barry-Wehmiller International Resources** promotes **Jim Webb** to senior partner, engineering services. **WeighPack Systems Inc.** appoints **Alan Benlolo** marketing manager and **Alex Goyette** territory manager for New England and Atlantic Canada.

## GROWING AND MOVING

**Nippon Automatic Fine Machinery Co.** opens a 45,000-sq-ft contract labeling facility in Lake Forest, CA.

**Crown Holdings, Inc.** will build a new beverage-can plant, expected to be operational by late 2009, on its existing food-can manufacturing site in Casablanca, Morocco.

**Cereplast, Inc.** remains on track to open its Seymour, ID, bio-based plastics-manufacturing plant in Q3 of this year, despite record area rainfalls.

**TricorBraun** expands its office in Guangzhou, China.

**CCL Tube Inc.** invests more than \$2 million to develop two in-line, small-diameter tube-production lines.

**Perigord Group** opens a new sales and operations center in Singapore.

**Siemens Energy & Automation, Inc.** invests more than \$20 million to develop a second plant in Elgin, IL, for its Drives Technologies business, expected to be completed in March 2009.

Continued on page 68

## Shrinking with Leister Hot Air Tools and Blowers.

One of many industrial applications using our blowers, heaters and nozzles.

Leister is the market leader with Sales and Service Centers in over 60 countries.



We know how.

**LEISTER**

PROCESS HEAT

Toll free numbers:

800 694 1472 (Western)

800 635 0384 (North-Central)

888 807 4030 (North-Eastern)

800 241 4628 (South-Eastern)

Leister Process Technologies  
Switzerland

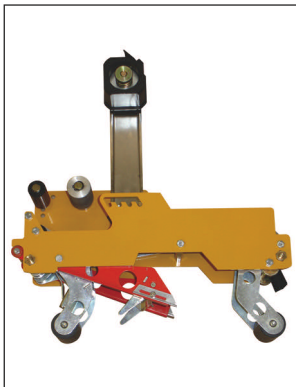
www.leister.com



# info showcase

For more information, contact **Barbara Levin** at (630) 288-8474, [blevin@reedbusiness.com](mailto:blevin@reedbusiness.com)

Literature and other multimedia, product announcements and websites for packaging machinery, materials, containers, supplies, and services. Contact supplier directly or respond online for information.



## Innovative NEW TAPE HEAD!

Replacing your sealer may not always be an option. At \$623.50 the Piranha Tape Head is a cost effective way to fix your old sealer. The most important function of the sealer is the tape head. We are so confident in our tape head that we offer a no risk 30-day guarantee! Try the Piranha or Barracuda tape head in your machine and see for yourself. Lightweight packages? No problem, we can seal EMPTY boxes! Visit our website at [www.absealer.com](http://www.absealer.com) for a video on the Piranha Tape Head.

**A.B. Sealer, Inc.**

920-885-9299 or e-mail [sales@absealer.com](mailto:sales@absealer.com)

## Flowmeter Filler Model EXACTA-R

Ronchi offers a compact 8 head advanced technology flowmeter filler Model EXACTA-R for users with moderate outputs for speeds up to 80 BPM. Developed from the unique and mature pedigree of 400 machines installed world wide, it has all the outstanding advantages of its larger family of flowmeter machines. Current blue chip users benefit from features including recipe management, quick C.I.P./S.I.P, 10 minute changeover, and "on-the-fly" fill adjustment for individual or all filling heads **Ronchi America LLC**, 201-802-1901, Fax: 201-802-1905 E: [info@ronchiamerica.com](mailto:info@ronchiamerica.com), [www.ronchiamerica.com](http://www.ronchiamerica.com)



## Shrink Sleeve Label/Band Applicator by TRIPACK

Tripack is proud to offer the all new MSA-180 shrink sleeve applicator, capable of applying Full Body Shrink Labels, TE Neck Bands, and Sleeves for Combo Packs at speeds up to 175-ppm. The mandrel "bullet" application system allows our applicators to handle round or odd shape products with precision. Product sizes ranging from 1" to 4.5" in diameter and changeovers in 5 minutes or less. Small footprint at 3sq ft cantilevers right over your existing conveyor. **Tripack LLC**, Toll Free: 866-900-1255, [www.tripack.net](http://www.tripack.net), Email: [sales@tripack.net](mailto:sales@tripack.net)



## Small Can Filler-Seamer Block

SBC Bottling & Canning Inc. formerly BC International, offers a new small counter-pressure Can Filler-Seamer block for beer, carbonated and still (Hot or Cold fill) beverages. The filler is equipped with 10 filling valves and the seamer with 1 single head for an average speed of 60 cpm. The block is versatile to handle multiple can sizes of 8, 9, 10.5, 12, 14, 16 and 24 oz. It is ideal for small microbrewery, pilot canning line, small batches of energy drinks, fruit juices, etc. **SBC Bottling and Canning Inc.**, 847-247-0233 [www.bcinternational.com](http://www.bcinternational.com) / Packexpo Booth E6462



## Fully Network-Manageable RFID-Ready

Versatility and value are the cornerstones of SATO's GL4e series, with features that surpass the competition. As an RFID-ready printer, it is field-upgradeable offering flexibility and scalability to meet end users' RFID printing requirements anytime. Only the GL4e Series offers a field-upgradeable UHF RFID option; an industry-leading printer management utility SATOnet CONNECT™; standard tri-port communication protocols, competitive emulations and much more.

**SATO America, Inc.** 888-871-8741;

[satosales@satoamerica.com](mailto:satosales@satoamerica.com); [www.satoamerica.com](http://www.satoamerica.com)

## Auto-feed System Option for Hot Melt Units

An auto-feed option is available for most Valco Melton hot-melt units. The system is designed to automatically maintain the desired amount of adhesive in the hot melt tank. No operator attention is required. The system eliminates adhesive contamination, waste and spillage associated with manual filling. Features include audible and visual confirmation of filling action.

**Valco Melton**

513-874-5581, [info@valcomelton.com](mailto:info@valcomelton.com), [www.valcomelton.com](http://www.valcomelton.com)



## 100% PCR PET Bottles

Method Products, Inc. has converted three of its U.S. product lines (9 SKUs) to 100% post consumer recycled (PCR) polyethylene terephthalate bottles from Amcor PET Packaging. The conversions, which affect 28-, 25- and 12-ounce bottles, are thought to represent the first 100% PCR applications in the United States for household cleaning products. The company had previously been using 100% virgin PET resin for these bottles.

**Amcor PET Packaging**

734-428-9741, [www.amcor.com](http://www.amcor.com)



## Super Rapid Thread Pre-Stretch Carriage

Cousins Packaging has built a reputation for excellence, quality and rugged performance in stretch wrap equipment. Our latest innovation, the patent-pending Super Rapid Thread Pre-Stretch Carriage delivers premium performance, allowing you to take advantage of today's hi-tech films and increase your film savings through maximum film yield. The Super Rapid Thread Pre-Stretch achieves 60% film roller contact (as compared to the industry norm of 35%) on a Safety Door Style Carriage! **Cousins Packaging Inc.** 888-209-4344, [www.cousinspackaging.com](http://www.cousinspackaging.com)

**MWV**  
MEADWESTVACO

## How do brands take shape?

MWV's integrated packaging platform unites product development, design, research, materials engineering and process management with paperboard mills, converting- and prepress-facilities and automation centers around the globe. We collaborate with companies to create packaging solutions that are more effective, more efficient and more sustainable. To learn more visit [www.mwv.com](http://www.mwv.com).

**MWV**

[info@meadwestvaco.com](mailto:info@meadwestvaco.com)

## EASYLABEL® 5 Terminal Server Labeling Software

Tharo Systems, Inc. presents the Terminal Server version of their EASYLABEL® 5 software for product identification, bar code and RFID labeling. EASYLABEL 5 Terminal Server provides you with all of the features that the Platinum version offers, but with the added ability to run on the Windows® Terminal Server platform. Extremely cost effective, a single version of Terminal Server allows for an unlimited number of users! **Tharo Systems, Inc.** 800-878-6833, [www.tharo.com](http://www.tharo.com)





# info showcase



## Sanitary Bulk Bag Unloading System

New Sanitary Bulk Bag Unloader eliminates dust during untying, discharging, retying, collapse and removal of bags while allowing thorough wash down. Forms a dust-tight connection between clean sides of bag and equipment. Airtight system vents to integral dust collector that vacuums displaced air/dust and collapses empty bags dust-free. Allows dust-free retying of partially empty bags. Promotes complete discharge automatically.

**Flexicon Corporation**  
888-353-9426, sales@flexicon.com,  
www.flexicon.com

## Norden Machinery AB

Norden Machinery AB is the world's leading manufacturer of tube filling and cartoning machinery. Our models have speed ranges of 25-500 tubes per minute. We are a medium sized company operating globally but maintaining close relations with our customers.

**Norden Inc.**  
800-526-5074; Fax: 908-707-0073  
E-mail: info.us@siriusmachinery.com  
www.norden-pac.com



## Phantom® Miro™

Vision Research's compact and rugged Phantom® Miro™ high-speed digital cameras offer the packaging industry a high-performance blend of resolution, speed, and light sensitivity. Ideal for situations demanding high-speed image capture, Miro goes beyond ordinary machine vision, allowing you to see in slow motion, the flaws hidden in every machine process.

**Vision Research**  
www.visionresearch.com



## SMC 5 Port Solenoid Valves Series SQ

The SMC 5 port solenoid valves series SQ was designed for applications which demand high speed, high frequency, long life and a precise response time. The SQ series has an outstanding response time of 12ms or less for SQ1000, 20ms or less for SQ2000 and a life of 200 million cycles. A wide variety of options are available.

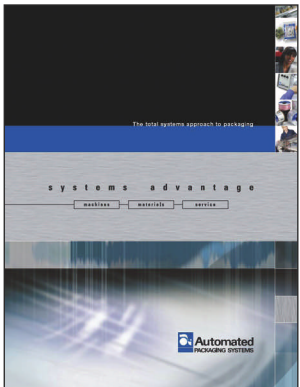
**SMC Corporation of America**  
317-899-4440, www.smcusa.com



## New Systems Advantage™ Program Benefits Offered

Automated Packaging Systems has recently added more features to its Systems Advantage™ Program, and is offering a new brochure that defines these new member benefits. "Systems Advantage" is a customer rewards program that combines machines, materials and services in a comprehensive packaging solution designed for maximum performance and value.

**Automated Packaging Systems, Inc.**  
Ph: 330-342-2000, Toll Free: 1-888-AUTOBAG  
Fax: 330-342-2400, info@autobag.com, www.autobag.com



## Intelligence Built Into Label Printer Applicators

FOX IV's new 3010 & 3610 Smart Machines are fully programmable label printer applicators. They feature USB host ports, Flash Memory slots and Windows drivers and support a wide variety of bar code formats, fonts and graphic formats. Scan, look up, print and apply; retain label formats; maintain control of peripheral devices and utilize logic programming ... all without a PC on the line.

**FOX IV Technologies, Inc.,** 724-387-3500,  
Fax: 724-387-3516, www.foxiv.com



## Drierite Desiccant Bags

DRIERITE Desiccant bags are filled with DRIERITE (anhydrous calcium sulfate), the highly effective and completely safe drying agent. DRIERITE will reduce the humidity in a sealed container to a -100 F dewpoint which is nearly 0% R.H. at ambient temperatures and will not release absorbed moisture. Packages that experience temperature changes during shipping and storage are best protected by including a DRIERITE desiccant bag.

**W.A. Hammond Drierite Co. LTD.,**  
Tel: 937-376-2927, Fax: 937-376-1977, www.drierite.com



# 15 Years

**FLEXiCELL**

## Flexicell Celebrates 15 Years

Flexicell, Inc. is celebrating 15 years as a leading robotic systems integrator specializing in robotic case packing, palletizing, and material handling solutions. Since its first job in 1993, Flexicell has delivered over 300 successful systems throughout North America. "We've always led our niche in packing and palletizing robotics and this is what we'll continue to do...better and better," says Hans de Koning, Flexicell president.

**Flexicell, Inc.,** 877-688-FLEX(3539)  
sales@flexicell.com, www.FLEXiCELL.com

**MRI**  
Flexible Packaging

## MRI Flexible Packaging

MRI Flexible Packaging is a manufacturer of stretch-sleeves, shrink-sleeves, OPP roll-fed labels and shrink roll-fed labels. Fully automated in-house art department, with digital direct to plate capability. MRI has turned innovative labeling concepts into reality - Your creativity and imagination is our challenge - Ask our team, we are confident you will be pleased.

**MRI**  
800-448-8183  
www.mriflex.com, info@mriflex.com

## PVC/PETG/OPS Printed Shrink Sleeves by Ameri-Seal Inc.

Front, Back, Sides...Ameri-Seals have you covered. These Shrink Labels can be printed up to nine colors rotogravure, and are available as clear, colored and custom printed PVC, PETG and OPS heat shrinkable films. High-Speed machinery formulations available. Give your products an edge over the competition with beautiful custom printed sleeves. PVC/PETG/OPS Shrink Labels meet industry tolerance and performance standards.

**Ameri-Seal Inc.,** Tel. (818) 700-9036 Fax: (818) 700-9062,  
www.ameri-seal.com, mail@ameri-seal.com





# newsmakers



Motoman Inc.

**Fabri-Kal Corp.** plans to open a design and manufacturing facility in Kalamazoo, MI, by Q3 of this year.

**Rohm and Haas Co.** begins operations at its Querétaro, Mexico plant, producing emulsion polymers and polyacrylates.

**Motoman Inc.** is relocating its Wixom, MI facility to Rochester Hills, MI.

**Wurzburg, Inc.** opens a warehouse distribution facility in Baton Rouge.

**Telamon Corp.** plans to invest more than \$3 million in upgrades for the technical support, engineering and logistics operations at its Carmel, IN headquarters.

**Western Plastics** moves its Temecula, CA-based film operations into a new \$6.5-million, 65,000-sq-ft facility.

**Pliant Corp.** plans to invest \$1.5 million to add two multilayer blown-film

extrusion lines at its Odon, IN facility.

**Ashland Inc.** installs more than \$2 million in equipment at facilities in Columbus, OH and Oak Creek, WI for its Specialty Polymers & Adhesives business.

**Plastican Inc.** says that it plans to add two molding machines for use in research and development at its plastic-pail manufacturing plant in Leominster, MA.

## BUYING AND ALLYING

**EskoArtwork** will acquire Mikkelsen Graphic Eng., Inc., a developer of the i-cut vision system.

**Adept Technology, Inc.**, provider of vision-guided robotics systems, signs Factory Automation Sales as its sales representative agency to Alabama, Mississippi and Tennessee, and

Menzel Vision and Robotics Pvt. Ltd. as its exclusive distributor in western and northern India.

**Checkpoint Systems, Inc.** will acquire OATSystems, Inc., a developer of RFID-based software and middleware.

**Anheuser-Busch Packaging Group** sells its Precision Printing and Packaging unit to Spear.

**Tegrant Corp., Alloyd Brands**, is licensed by MeadWestvaco Corp. to manufacture and market Natralock® Security Packaging.

**Graham Packaging Holdings Co.** will be acquired by Hicks Acquisition Co., Inc. for \$3.2 billion and will subsequently go public as Graham Packaging Co.

A majority interest in **Kliklok International** is acquired by its senior management.

**Lowry Computer Products** agrees to provide radio-frequency identification-based turnkey asset-tracking and work-in-process solutions for OATSystems.

**Pearson Packaging Systems** joins the recently launched machine builder sector of the Rockwell Automation PartnerNetwork program, which, in part, offers engineering consultation on new machines and redesigns.

**Thin Battery Technologies** changes its name to Blue Spark Technologies.

**Gage Industries, Inc.'s** packaging

business was acquired by Sabert Corp. **Earthcycle** signs J-Tech Systems Pty Ltd. as its distributor to Australia and New Zealand.

## CHEERS

**WS Packaging Group Inc.** earns FSC Chain-of-Custody certification for its folding carton and commercial sheet-fed facility in Oak Creek, WI.

**Shorewood Packaging** received 10 awards in the 65th annual National Paperboard Packaging Competition, including Gold Awards for Warner Brothers' NFL America's Game: Super Bowl Champions' DVD series and Harry Potter Years 1-5 Limited Edition Gift Set.

**Misumi USA**, supplier of automation components, celebrates its 20th anniversary.

**Klöckner Pentaplast** received for the second consecutive year the Febrapharma Quality Award from the Brazilian Pharmaceutical Industry Federation in the "Plastics Films to Blister" category. Criteria for the packaging award include quality control, technical support, customer service and innovative industry solutions.

**Graham Packaging Co.** for a third straight year was named Supplier of the Year for packaging by the H. J. Heinz Co.

# info showcase



## The Latest in Palletizer Technology

Increase productivity with Columbia Machine's New SP4000 palletizer with bi-parting stripper apron; a small footprint, high-level, high capacity palletizer capable of forming complex patterns with gaps in both directions. The features of the SP4000 combined with Columbia's state-of-the-art Product Manager controls package offers users an easy-to-operate palletizer that will meet current and future pattern needs! View a video at [www.palletizing.com](http://www.palletizing.com).

**Columbia Machine, Inc.**, Ph: 800-628-4065  
pallsales@colmac.com, [www.palletizing.com](http://www.palletizing.com)

## Wondering about Wireless?

Banner's SureCross Wireless Developer's Evaluation Kit includes a Gateway, one Node transceiver and all the educational literature you need to start testing applications on-site where your specific range and response time requirements can be examined.

Only \$295.

**Banner Engineering Corp.**

Ph: 1-800-809-7043

Fax: 763-544-3213

[www.surecross.com/devkit](http://www.surecross.com/devkit)



wireless developer's evaluation kit **\$295**  
[www.surecross.com/devkit](http://www.surecross.com/devkit)

## Vertical Cartoner/Bottle Loader

The Bivans Model 74A707 fully-automatic vertical cartoner automatically loads bottles and vials at speeds of 80 to 120 cartons per minute. The product is positioned vertically to eliminate leakage and ensure product integrity. The machine erects, loads, and closes the cartons, for an operator-free production line. The cartoner includes an infeed conveyor, which can be mated with a rotary table or other accumulating device to feed in the bottles. A wide range of sizes and styles of cartons, including glue, tuck, and fifth panel display, can be accommodated. **Bivans Corporation**  
(323) 225-4248, Fax: (323) 225-7316, [www.bivans.com](http://www.bivans.com)



## Enercon's Super Seal™ Max Packs a Punch

When it comes to induction sealing the Super Seal Max is the undisputed heavy-weight champ. Its knockout ability to seal containers at an excess of 300 feet per minute makes it perfect for packagers with demanding applications. An integrated power supply and patented sealing head design provide a devastating combination for all induction sealing challenges. For more information visit [www.enerconind.com/sealing](http://www.enerconind.com/sealing)

**Enercon Industries**

262-255-6070



# marketplace

## NEW — REVOLUTIONARY...CAN LINE TECHNOLOGY NOW AVAILABLE!!!!!!

CURRENTLY IN USE BY ALL MAJOR BEVERAGE MANUFACTURERS

INTRODUCING THE ENTECH FABRICATIONS, INC.

"GATLING GUN"™ @ CONTAINER FEED SYSTEM (PATENT PENDING)

- ONE "GATLING GUN"™ @ SYSTEM CAN RUN MULTIPLE CAN SIZES (BOTH HEIGHT AND DIAMETER ADJUSTABLE) IN THE SAME SET UP.
- NEW CAN SIZES CAN BE ADDED AT A MINIMAL COST.
- NO MORE LOST OR DAMAGED FITTINGS.
- LINE DOWN TIME TO CHANGE FITTING SIZES CUT TO MINUTES NOT HOURS.
- THIS SYSTEM CAN BE UTILIZED ANYWHERE YOU WOULD NEED A MULTIPLE CAN SIZE RUN.

ENTECH FABRICATIONS, INC • 708-597-5568 • WWW.ENTECHFABRICATIONS.COM

### FRAIN GROUP

**NEW ARRIVALS EVERY DAY!**

5E3790 Buhler Maig 3-roller Dispersion Mill 400 lbs/hr  
 5E3260 B&H Roll Stock Glue/Shrink labeler 500 cpm  
 5E3940 Columbia Full Case Palletizer Rated to 20 cpm  
 5E1165 Circle Liquid/Paste Filler 60 cycles per minute  
 5E3900 Doboy Auto Flow Thru Horiz Shrink Wrapper  
 6K0101 Douglas Auto Wrap Around Case Packer 21cpm  
 5E1371 Econocorp Semi Automatic Cartoner 25 cpm  
 6R0083 Elliot Auto Top Case Sealer Capable of 20 cpm  
 5E3751 Filler Capabilities Auto s/s 10hd Filler 30gal/min  
 5E3130 FMC Horiz Flow Thru Shrink Wrapper 160ppm  
 5E2728 Focke & Co Case Erector/Packer/Sealer 15 cpm  
 5D9943 Hartness Automatic Drop Case Packer 30 cpm  
 5E0598 Hayssen Auto Horiz Inverted Wrapper 100 ppm  
 5E2382 Imar Multi-lane Vertical form / fill / seal 180ppm  
 5E1040 Kaps All Automatic 4 spindle Capper 80 cpm  
 R23241 Kiss Pkg Semi Auto (6) spindle capper 150cpm  
 5E0950 Kisters In-Line shrink bundler w/tunnel 120cpm  
 6M1980 Lock s/s 1.5" H x 24"W Aperture Metal Detector

6R0088 New England Secondary Bottle Orientator 300 bpm  
 6M1993 Quadro S/S Particle Size Reduction Mill 800 lbs/hr  
 5E0220 Posimat 14 Pocket Bulk Bottle Unscrambler 200bpm  
 5D9121 Prototype 28 Head Pic N Place Case Packer 600ppm  
 5E0528 Ramsey S/S Dual Lane Checkweigher 165 feet / min  
 5D9147 Randles Tuck Tray Former 25"L x 16"W x 4"H 65cpm  
 5E1770 Raque Complete Tray Filling/Sealing Line 110 tpm  
 6M1122 Rasch Semi Auto Fold/Bunch Foil Wrapper 70 wpm  
 5E3620 Renneco Semi Auto Hori L Bar Below Sealer 30 bpm  
 5E1630 Ross Vertical Double Planetary Paste Mixer 200 gal  
 5E0876 Rovema Continuous Motion Form/Fill/Seal 160 bpm  
 5D9085 Safeline Metal Detector 25"Aperture 2 3/8"Clearance  
 5E0122 Saga Auto Double Fill Plastic Tube Filler 120 tpm  
 5D9991 Scandia Semi Auto Horiz Hot Melt Cartoner 100cpm  
 5E3501 Seitz 16 Head Rotary Counter Pressure Filler 75bpm  
 R23312 Sergeant Semi Auto L Bar Sealer & Shrink Tunnel  
 5D9591 Shanklin Flow Thru lap seal shrink wrapper 100ppm  
 5E3810 Shorewood Auto Inline S/S P/S Front / Back Labeler

Chicago AREA (630) 629-9900 www.fraingroup.com

Standard classifications are: Machinery & Materials; Contract Packaging; Career Opportunities. Other more specific classifications may be requested. 2008 rates are \$315.00 net per column inch (1 time frequency), \$300.00 net per column inch (3 time frequency), \$285.00 net per column inch (6 time frequency), \$275 .00 net per column inch (12 time frequency). Add \$30.00 net per column inch for second color. Colors available are: Standard Red, Blue, Green, Yellow and Magenta. All rates are non-commissionable. Blind Boxes are available for a \$25.00 fee. Deadlines: 5th of the month preceding issue. Please send all materials, insertion orders to:

PACKAGING DIGEST Marketplace Sales Manager  
 2000 Clearwater Drive, Oak Brook, IL 60523 • Fax: (630) 288-8750  
 Attn: Barbara Levin • Phone: (630) 288-8474  
 E-mail: blevin@reedbusiness.com



## Machinery & Materials

### World's Largest Supplier of Rebuilt and New Processing & Packaging Machinery

Agitators	Capsule Fillers	Dryers	Kettles	Revolving Pans	Strip Packagers
Ampule Fillers	Cartoners	Extruders	Labelers	Roasters	Tablet Counters
Auger Fillers	Case Packers	Filters	Liquid Fillers	Scales	Tablet Presses
Bag Sealers	Case Sealers	Flow Wrappers	Metal Detectors	Shrink Tunnels	Tanks
Bar Wrappers	Check Weighers	Form, Fill & Seal	Mixers	Shrink Wrappers	Tube Fillers
Blister Packagers	Colloid Mills	Fryers	Neck Banders	Sifters	Unscramblers
Box Wrappers	Cottoners	Granulators	Piston Fillers	Slicers	Vacuum Packagers
Can Sealers	Dedusters	Grinders	Powder Presses	Soap Cutters	Vial Fillers
Candy Wrappers	Dicers	Homogenizers	Pumps	Soap Plodders	Volumetric Fillers
Cappers	Dust Collectors	Induction Sealers	Refiners	Soap Presses	Weighers

### UNION STANDARD EQUIPMENT

718.585.0200 www.unionmachinery.com sales@unionmachinery.com

**WATERLESS CAP SEALER®**  
 Automatic & Semi-Automatic Induction Sealers

- Advanced "SMART SEAL™" digital induction sealer technology
- Compact/user friendly/stainless steel construction
- Complete inspection and quality assurance systems
- Maintenance and trouble-free
- Cost effective, seals a wide range of containers and caps
- Originator of the "Waterless Cap Sealer"

www.automatetech.com

34 Hinda Blvd., Riverhead, NY 11901 USA • Tel (631) 727-8886 • Fax (631) 369-3903

## Auction

Online Auction - By order of the Secured Party, General Electric Capital Corporation

### Complete (2003) Wächter Tile to Backer Board Bonding and Packaging Lines

Online Sale

**Sale Closing:** Friday, 12<sup>th</sup> September 2008 at 18:00 EDT (local time)

**Location:** Dalton Georgia, USA **Inspection:** By appointment only

#### Also available:

- Mitutoyo B251 Bridge Type CMM, Series # 806M-5
- Mitutoyo CD-24" C Digital Caliper
- Electroil Type 4UG79 Spin Balancer
- Zebra 105 SL Label Printers
- Hardboard Backing Board
- Wire Crafters Security Cage Panels

**Contact:** DENNIS SCHMELING

**Phone:** +1 920 344 6250 **Email:** dennis.schmeling@go-dove.com

**GoIndustry GA Lic. # ACNR002325 David S. Fox GA Lic. # AUNR002414**

To view and bid on the lots please visit

www.Go-Dove.com



### REFURBISHED BAGGERS

Two Lines to Choose From:

**Advanced Poly**

T-1000 Bagger  
 Infeed Conveyors  
 Counters  
 Printers

T-1000 Bagger

**APS**

Baggers  
 Counters  
 Scales

US-4000 Rotary Check-Weigh Scale

T-300-375  
 Tabletop Baggers

TI-1000  
 Printer

- Guaranteed Like New!
- Warranty Same as New Equipment
- Factory-Trained Technicians
- Spare Parts Program
- Full Service
- Models from 2005

**Advanced Poly-Packaging, Inc.**  
**1-800-754-4403**  
 1331 Emmitt Rd. • Akron, OH 44306  
 330-785-4000 • Fax 330-785-4010  
 www.advancedpoly.com • sales@advancedpoly.com

**FOR SALE**

Used Form/Fill/Seal/Machines  
 Also New Parts! Tape, Nichromes,  
 Knives, Heaters, and More.

**Miller's Technical Service Inc.**  
**630-553-1797 • Fax: 630-553-2165**  
*Since 1986*

## Relax...

Whether you are looking for a reliable and affordable container-handling solution, or need a complete system, let FEMC take the worry out of your decision-making process.

**FEMC®**  
**216-663-1208**  
**www.femc.com**

www.packagingdigest.com



# marketplace

## Machinery & Materials

### We're the Sure Choice!

770.307.4755

[www.surekap.com](http://www.surekap.com)

SureKap is more than a reliable packaging equipment manufacturer. We are devoted to building long term satisfaction with our customers as well as machines that last. Contact us to help with your next capping and filling equipment needs!

■ Cappers ■ Turntables  
■ Fillers ■ Conveyors

**SUREKAP**  
Fills Right. Caps Tight.

### COMPLETE BOTTLING SYSTEMS ... since 1941

Get the Reliability, Flexibility, Accuracy and Versatility you need in Packaging Machinery

[www.kapsall.com](http://www.kapsall.com)

**Fast Changeovers**  
Little or no change parts required

- Unscramblers
- Orienters
- Bottle Cleaners
- Liquid Rotary and Straight Line Fillers
- Cap, Parts Feeders
- Automatic Cappers
- Conveyors
- Torque Monitoring
- Induction Foil Sealers
- Inspection Systems
- Complete Packaging Systems

The Proven Standard @ ... Since 1941.

**KAPS-ALL**  
PACKAGING SYSTEMS INC.  
KAPS-ALL CAPPER @ FILLERS-ALL @  
FEED SYSTEMS @ ORIENTAINERS @

200 Mill Road, Riverhead, NY 11901 USA • Tel (631) 727-0300 • Fax (631) 369-5939



### THE ORIGINATORS OF MODULAR CONVEYORS!



208 South Rt. 73, Blue Anchor, NJ 08037  
Phone: 1-800-257-8581 [www.garvey.com](http://www.garvey.com)  
Email: [infinity@garvey.com](mailto:infinity@garvey.com)

## PRIME

*Flexibles*

"Custom Laminations Without the Big Minimums"

- \* High Resolution 10 Color Printing
- \* Unique Sealant & Multi-Ply Capability
- \* Pre-Made Pouching Available

Ph. 262-542-1600 • [www.primels.com](http://www.primels.com)

### WHEN PERFORMANCE COUNTS



### VOLUMETRIC FILLERS

Liquids, Pastes & Powders

- direct draw fillers starting at \$2,250.00
- table top and multi-cylinder automatics
- heated hoppers, agitators, no drip nozzles, conveyors, hand cappers, etc.

[www.packagingenterprises.com](http://www.packagingenterprises.com)

**GEYER**

Packaging Enterprises Inc.  
Philadelphia, PA

since 1914

800-453-6213

### YOUR BEST SOURCE FOR VACUUM CUPS!



VI-CAS PRODUCES OVER 750 STYLES OF VACUUM CUPS, BELLOWS AND OBLONG CUPS IN SIZES RANGING FROM 1/8" TO 11". MADE OF LONG LASTING POLYURETHANE, VINYL, OR SILICONE.

OTHER ITEMS AVAILABLE INCLUDE  
CUP ADAPTORS • ROLLERS • BELLOWS • CAPPER DISKS

CALL FOR FREE SAMPLES - Ext. 210

513.791.7741  
513.791.6484 FAX  
[www.vi-cas.thomasregister.com](http://www.vi-cas.thomasregister.com)



[vicas@juno.com](mailto:vicas@juno.com)

### USED PACKAGING EQUIPMENT EXCELLENT CONDITION

#### Item #1 Wexar - Automotive Case Former

Model ABF-G w/Sprinkle Glue System

Value \$35,750.00 **Buy Now \$12,750.00**

#### Item #2 METALCRAFT - Stainless Steel Trans Stor

Tanks w/1 1/2" Bottom Valve Opening

Value \$1200.00 **Buy Now \$550.00 ea. (pre-cleaned)**

#### Item #3 Worthington-Nalgene XL-200 Gal Poly Tanks

w/1 1/2" Ball Valve Bottom Opening

Value \$475.00 **Buy Now \$75.00 ea. (as is condition)**

#### Item #4 Four-Cavity 16 oz Oblg. Trent w/28-410

PVC Plastic Bottle Mold (Dual Cavity 140 mm Head

Center Distance in Beryllium Copper)

Value \$22,000.00 **Buy Now \$6,500.00 ea. (Note: Like new)**

#### Item #5 Cardinal Portable Dial Scale (260 lb)

Value \$1,500.00 **Buy Now \$375.00**

CONTACT: PAC ASSOC. OF OHIO

1-937-477-4781 OR [bcuilepper@woh.rr.com](mailto:bcuilepper@woh.rr.com)

### Cellulose Self-Sealing Bands



- Protects product
- Eliminates leakage
- Provides attractive seal
- Over 90 stock sizes (14mm to 116mm diameter)
- Fast delivery
- No equipment necessary
- Biodegradable

Walter H. Jelly Ltd. Serving Our Customers for over 50 Years!

Phone: 847/455-4235  
FAX: 847/455-4315

On-line ordering:  
[www.walterjelly.com](http://www.walterjelly.com)

### PACKAGING EQUIPMENT

NEW & USED PACKAGING MACHINERY  
YOUR MIDWEST CVC DEALER

"Complete 'turn-key' line integration"



**MIDWEST**  
PACKAGING  
SYSTEMS

PH/FAX: 636-225-1555

E-mail: [midwestpak@aol.com](mailto:midwestpak@aol.com)

[www.midwestpackagingsys.com](http://www.midwestpackagingsys.com)

- Bottle & Cap Handling
- Change Parts Storage Carts
- Used & Rebuilt Equipment
- Installation & Design Services
- Machine Repair Parts
- Experts in Rebuilding Consolidated and Resina Capping Equipment



**CHANGE PARTS INC**

231-845-5107

Check us out > [www.changeparts.com](http://www.changeparts.com)

Serving "Family Owned" to "Fortune 500" companies



**FLEXPAK**

Bags Pouches Tubing Sheeting

**YOUR COMPLETE SOURCE  
FOR ENGINEERED FLEXIBLE  
PACKAGING SOLUTIONS**

**KNF FLEXPAC CORP.**

Phone: 570-386-3550 • Fax: 570-386-3703

[www.KNFcorporation.com](http://www.KNFcorporation.com)

[sales@knfcorporation.com](mailto:sales@knfcorporation.com)

## AUGERS,

FUNNELS and PARTS

for All-Fill, AMS,  
Bartelt®, Mateer and  
Spee Dee Fillers



- OEM QUALITY
- REFER TO PART NUMBER
- MOST ITEMS IN STOCK

**Auger Manufacturing Specialists**

22A Bacton Hill Road  
Frazer, Pennsylvania 19355 USA

USA & Canada, Toll Free: 1-(800)-544-1199  
(610) 647-4677 Fax (610) 640-9085

[www.augermfgspec.com](http://www.augermfgspec.com)

E-mail: [info@augermfgspec.com](mailto:info@augermfgspec.com)



Registered trademarks used are owned by their respective owners

- Inline Liquid Filling & Capping Systems
- Volumetric Gravity, Volumetric Pressure/Gravity & Pump Filling Technologies
- Thin to Thick Liquids including Molten & Foaming Products
- Food Grade, Sanitary, Pharmaceutical, Hazardous & Corrosive Environments

**E-PAK**  
MACHINERY INC

219-393-5541

Check us out > [www.epakmachinery.com](http://www.epakmachinery.com)

Serving "Family Owned" to "Fortune 500" companies

**GALLIMORE**  
INDUSTRIES, INC.

- In-pack promotions and inserting equipment.
- Overwrapped and direct food contact inserts.
- AIB approved-superior rating.
- Lease, sell or use if we do the printing.
- Bandolier inserter also available.

847-356-3331

800-927-8020

[mark@gallimoreinc.com](mailto:mark@gallimoreinc.com)

[www.gallimoreinc.com](http://www.gallimoreinc.com)



### LABELING MACHINES PRESSURE SENSITIVE & PLAIN PAPER



[WWW.ADVENTMACHINE.NET](http://WWW.ADVENTMACHINE.NET)

FOR MORE INFORMATION AND ONLINE VIDEOS

ADVENT MACHINE LLC • T: 800-846-7716 • F: 323-728-2443

### for marketplace ADVERTISING

OPPORTUNITIES IN...

**PACKAGING  
DIGEST**  
MAGAZINE

CONTACT:

**BARBARA LEVIN**

630-288-8474

e-mail: [blevin@reedbusiness.com](mailto:blevin@reedbusiness.com)

or fax your ad copy to:

630-288-8750



# marketplace

## Contract Packaging

**BRINGING YOUR PRODUCTS TO MARKET FROM CONCEPT TO CONSUMER**  
**SPECIALIZING IN SUPPLY CHAIN SOLUTIONS**

**Aldelano Packaging Corp.**  
**Outsourcing Solutions**

**Contract Packaging**

- ▶ Anywhere in the US
- ▶ Test Market or ongoing

**Material Procurement**

- ▶ Source & Purchase Materials
- ▶ Manage Releases & Deliveries
- ▶ Many Industry Partners

**Manufacturing Support**

- ▶ On-Site Project Staffing
- ▶ Material Handling
- ▶ Laboratory testing

**Warehouse Logistics**

- ▶ Fulfillment
- ▶ Foreign Trade Zones

**Marketing**

- ▶ Packaging Design
- ▶ New Product/Display Concepts

**Services Provided In Your Facility Or Ours**  
**1-800-9PACK99 (1-800-972-2599)**  
**www.aldelano.com**

*Ask us about corrugated & packaging supplies!*

**PERSONAL CARE CONTRACT MANUFACTURER**

- Liquid Pouches (Form, Fill, Seal)
- Tube Filling
- Liquid Bottle From Amenity to 5 Gallon
- Flexibility of Filling Any Viscosity

**PACKAGING ON DEMAND**

1284 Puerta Del Sol  
 San Clemente, CA 92673  
 Phone: 949.226.7289  
 www.pakondemand.com  
 E-mail: sales@pakondemand.com

**Cup Pac Contract Packaging**

**\*\* Portion Control! \*\***

- AIB Superior, Kosher, HACCP
- Hot, Cold, Viscous, Cheeses, Liquids, Powders, Dry, Pre-wrapped
- Turnkey solutions from concept to consumer. No minimums
- Separate peanut/tree-nut packaging facility

Toll Free: 877/347-9725 www.cuppac.com info@cuppac.com

## Labels

**CGMP**

**Copy Expansion Labels...**

**BookletLabels.com**  
 That's All We Do!®

**Let JHBertrand Make Your Booklet Labels**

**Place your marketplace ad TODAY!**  
**Call Barbara Levin at 630/288-8474**  
**Fax: 630/288-8750**

## Modular Framing

**80/20** **80/20 Inc.** **NEW!**  
 The Industrial Erector Set® **HT Series™**

**For The Full Story...**  
**www.8020.net**  
 Toll Free: 877-248-8020  
 Fax: 260-248-8029

www.8020.net Modular T-Slotted Aluminum Framing!

## Career Opportunities



Do you want to make a positive difference? Interested in an exceptional opportunity for professional growth?  
**Pharmaceutical Packaging Engineer**

NYCOMED US Inc. (formerly ALTANA Inc.), a subsidiary of a multinational Pharmaceutical company, is seeking a highly motivated, results-oriented professional team-player to join its world-class engineering team in Hicksville, New York, located in historic Nassau County, just thirty miles from the heart of New York City.

As Packaging Engineer, you will work with industry leaders to improve our packaging processes; packaging automation, design, size and prepare specifications for all packaging components; create templates working with our Art and Quality Assurance departments; evaluate all new packaging components for fitness for purpose; manage procurement and delivery of change parts; coordinate, plan, and direct activities of designated projects to achieve goals and objectives of package engineering issues/projects, within prescribed schedule, parameters and budget.

BS in Engineering required, with a minimum of six years experience as a packaging engineer. Ideal candidate would have excellent communications skills, cGMP expertise along with a good working knowledge of Microsoft Word, Excel, Project and Powerpoint. In-depth knowledge of compliance, materials, automation and industry practices will be given favorable consideration.

We offer a competitive salary and benefits package, and a dynamic, challenging work environment.

To learn more about this opportunity and to apply on line, please visit the Careers section at [www.nycomedus.com](http://www.nycomedus.com).

EOE AA M/F/D/V

### Help Wanted

**OPERATIONS MANAGER** for multi-product food packaging facility in the North-East. Knowledge and experience in packaging machinery (dry and wet), Quality Assurance and Sanitation procedures essential. Will interface with plant manager, QC manager, lead mechanic and others. Send resumes to:

Barbara Levin • Packaging Digest • 2000 Clearwater Drive  
 Oak Brook, IL 60523 • Ref#PD6081  
 or e-mail resumes to [blevin@reedbusiness.com](mailto:blevin@reedbusiness.com)

**PACKAGING PDG DESIGN GROUP**

**Sales Representative**

NY / NJ area for packaging distributor. Must have experience in industry. Must currently be located in NY / NJ area. Generous profit sharing. Send resume to [sales@packagingdesigngroup.com](mailto:sales@packagingdesigngroup.com) or call 410-584-9550.

**RICK PASCAL & ASSOCIATES, INC.**  
 Packaging Industry Executive Search & Recruitment  
 Dedicated to finding the best packaging talent

Rick Pascal, CPC  
 P.O. Box 543, Fair Lawn, NJ 07410  
 (201) 791-9541 ♦ Fax (201) 791-1861  
[www.packagecareers.com](http://www.packagecareers.com)  
 Serving Our Clients Since 1984

**Would you like to be a part of an Industry Leader in a fast growing Consumer Products Company?**

A Packaging Engineer is needed in Delaware, Ohio to take our package design and packaging process to State of the Art levels. Actively manage current package designs and lead new package design concepts that meet the challenges of consumer expectations.

If you have general knowledge and experience of product evaluation methods and packaging material properties and a broad knowledge of quality control techniques, this is a great opportunity to join a company who offers exceptional benefits and competitive pay.

Please send your resume and salary requirements to:

Barbara Levin • Packaging Digest • 2000 Clearwater Drive  
 Oak Brook, IL 60523 • Ref#PD8081  
 or e-mail to [blevin@reedbusiness.com](mailto:blevin@reedbusiness.com)

Well-established Northeast Laminating, Coating and Converting Company is looking for Manufacture Representatives to represent their products and services. Including Multilayer Laminations, Industrial Coatings, and Converting Generous Commissions, Non-Disclosure, Confidentiality All interested parties please forward information to:

**SCP/Marks Group**  
 45 E. City Ave. # 342,  
 Bala Cynwyd PA 19004  
 or  
 E mail: [bob@inventedproducts.com](mailto:bob@inventedproducts.com)

# ad index

<b>A Schulman Inc</b> 800/547-3746	<b>25</b>	<b>CTM Labeling Systems</b> 330/332-1800	<b>16</b>	<b>IMA North America Inc</b> 203/331-0331	<b>51</b>	<b>Sato America Inc</b> 888/871-8741	<b>17</b>
<b>Alcan Packaging</b> 773/399-3742	<b>19</b>	<b>CVC Technologies</b> 877/282-7333	<b>C3</b>	<b>Klöckner-Pentaplast of America</b> 540/832-3600	<b>14-15</b>	<b>Sharp Packaging Systems Inc</b> 800/634-6359	<b>1</b>
<b>Alpha Packaging</b> 800/421-4772	<b>36</b>	<b>Diagraph Corp</b> 800/722-1125	<b>53</b>	<b>Labeling Systems Inc</b> 201/405-0767	<b>28</b>	<b>Sick Inc</b> 800/325-7425	<b>49</b>
<b>Amphenol Sine Systems</b> 586/465-3131	<b>31</b>	<b>Flexicon Corp</b> 610/814-0600	<b>43</b>	<b>Labthink Instruments Co Ltd</b> +86 531-85811021	<b>52</b>	<b>Siemens Energy &amp; Automation</b> 800/964-4114	<b>29</b>
<b>Auto Labe Booth Mfg Co</b> 800/634-5376	<b>72</b>	<b>Fox IV Technologies Inc</b> 724/387-3500	<b>55</b>	<b>Leister Process Technologies</b> 800/694-1472	<b>65</b>	<b>SIG Doboy</b> 715/246-6511	<b>7</b>
<b>Automated Packaging Systems</b> 800/331-4414	<b>13</b>	<b>Fres-Co System USA Inc</b> 215/721-4600	<b>4</b>	<b>MeadWestvaco Corp</b> www.mwv.com	<b>23</b>	<b>SMC Corp</b> www.smcusa.com	<b>59</b>
<b>Axon Corporation</b> 919/772-8383	<b>12</b>	<b>Fumex Inc</b> 800/432-7550	<b>57</b>	<b>Monitoring Technology Corp</b> 703/698-5520	<b>4</b>	<b>Smyth Cos</b> 800/473-3464	<b>24</b>
<b>Beckhoff Automation</b> 877/894-6228	<b>35</b>	<b>Garvey Corp</b> 800/257-8581	<b>64</b>	<b>Multisorb Technologies Inc</b> 716/824-8900	<b>40</b>	<b>Stäubli Corp</b> 800/257-8235	<b>34</b>
<b>Bodolay Packaging Machinery</b> 813/754-9960	<b>72</b>	<b>Gilbreth</b> 800/630-2413	<b>3</b>	<b>Multivac Inc</b> 816/891-0555	<b>56</b>	<b>Stull Technologies</b> 732/873-5000	<b>10</b>
<b>Caplugs</b> 888/CAPLUGS	<b>30</b>	<b>Graphic Arts Show Co</b> 703/264-7200	<b>63</b>	<b>National Adhesives/Henkel Adhesives Technologies</b> 800/797-4992	<b>C4</b>	<b>Syfan USA Corp</b> 877/792-2547	<b>58</b>
<b>CDF Corp</b> 800/443-1920	<b>42</b>	<b>Hitachi America Ltd</b> 914/524-6645	<b>C2</b>	<b>Norden Inc</b> 908/707-8008	<b>48</b>	<b>Teledyne TapTone</b> 508/563-1000	<b>61</b>
<b>Cermex</b> 941/739-0607	<b>48</b>	<b>HLP Clear Packaging Products (USA) Inc</b> 888/HLP-PACK	<b>44</b>	<b>Nordson Corp</b> 440/985-4226	<b>45</b>	<b>Transparent Container Co Inc</b> 708/449-8520	<b>47</b>
<b>ChemInstruments, a Chemsultants International co</b> 513/860-1598	<b>61</b>	<b>Hytrol Conveyor Co Inc</b> 870/974-5642	<b>52</b>	<b>PACK EXPO Intl 2008</b> www.gopackexpo.com	<b>20-21</b>	<b>Tronics</b> 219/769-0876	<b>64</b>
<b>CHEP USA</b> 407/370-2437	<b>11</b>	<b>ID Technology</b> 817/626-7779	<b>37</b>	<b>Panasonic Electric Works Corp of America</b> 877/624-7872	<b>54</b>	<b>US Tsubaki Inc</b> 800/323-7790	<b>60</b>
<b>Cognex Corp</b> 508/650-3000	<b>32</b>			<b>Polypack Inc</b> 727/578-5000/www.polypack.com/pd3	<b>18</b>	<b>Unit Pack Co Inc</b> 877/930-3200	<b>8</b>
				<b>QuadTech</b> 414/566-7500	<b>33</b>	<b>Videojet Technologies</b> 800/654-4663	<b>27</b>
				<b>QuickLabel Systems, An Astro-Med Product Group</b> 877/757-7978	<b>9</b>	<b>WA Hammond Drierite Co</b> 937/376-2927	<b>62</b>
				<b>RD Industries Inc</b> 800/759-7090, ext. 3	<b>24</b>	<b>Wago Corp</b> 800/346-7245	<b>39, 41</b>
						<b>WeighPack Systems Inc</b> 888/934-4472	<b>5</b>



...on  
**packagingdigest.com****New Blog:  
Eye on  
Packaging**

Join New Media Editor David Bellm as he takes a not-so-serious look at packaging. You'll discover stunning visual inspirations, great marketing ideas and hilarious oddities from around the world.

[www.packagingdigest.com](http://www.packagingdigest.com)

**PD releases Vol. 2  
of Automation Study**

Equipment manufacturers offer their view of the packaging market and where it's heading.

[www.packagingdigest.com/automationresearch](http://www.packagingdigest.com/automationresearch)

**Intellectual Property Law  
Podcast Series**

Associate Editor Linda Casey discusses intellectual property law with Brad Rademaker of Banner & Witcoff.

[www.packagingdigest.com/podcasts](http://www.packagingdigest.com/podcasts)

**newsbytes**

Visit [packagingdigest.com/bytes](http://packagingdigest.com/bytes) for these top headlines in the packaging marketplace.

**Sara Lee pressed for whole truth on whole grain**

A food-labeling advocacy group has forced Sara Lee Corp. to clarify the amount of whole grain in its Soft & Smooth bread.

**'Green' products often are still overpackaged**

So-called "Green" products often are shipped in packages many times their size in nonrecyclable, virgin plastic containers, according to some observers.

**industry happenings**

Visit [www.packagingdigest.com/toc-events](http://www.packagingdigest.com/toc-events) to find a comprehensive list of industry events happening around the world.

**RFID World 2008**

Sept. 8-10, Las Vegas

**HBA Global Expo & Educational Conference**

Sept. 9-11, Jacob K. Javits Convention Center in New York

**Labelexpo Americas 2008**

Sept. 9-11, Rosemont, IL

**Sustainable Packaging Coalition Forum**

Sept. 9-11, Denver Marriott Tech Center

**IDTechEx RFID Europe 2008**

Sept. 30-Oct. 1, Cambridge, England

**Graph Expo**

Oct. 26-29, McCormick Place, Chicago

**PACK EXPO International**

Nov. 9-13, McCormick Place, Chicago

Visit [www.packagingdigest.com/whitepapers](http://www.packagingdigest.com/whitepapers) to find white papers covering issues in the packaging marketplace:



**White Paper: Packaging Intelligence Brief—Automation Trends**  
**Packaging Machinery** published by The Packaging Machinery Manufacturers Institute (PMMI). Download at [www.packagingdigest.com/automationtrends](http://www.packagingdigest.com/automationtrends)

Reed Business Information, A Division of Reed Elsevier Inc. • Specialized Business Magazines for Building & Construction • Computer and Communication • Electronics • Entertainment • Furniture Mfg/ Retail Furnishings • Hospitality • Manufacturing • Medical/Scientific and Processing Publishing • and Printing/Packaging.

PACKAGING DIGEST® (ISSN 0030-9117) (GST# 123397457) is published monthly by Reed Business Information, 8878 South Barrons Blvd., Highlands Ranch, CO 80129-2345. Reed Business Information is a division of Reed Elsevier Inc., is located at 360 Park Avenue South, New York, NY 10010. Tad Smith, CEO, Jeff Greisch, President, Chicago Division, John Poulin, Senior Vice President, Finance. PACKAGING DIGEST copyright 2007 by Reed Elsevier Inc. All rights reserved. PACKAGING DIGEST® is a registered trademark of Reed Elsevier Properties Inc. used under license. Periodicals postage paid at Littleton, CO 80126 and additional mailing offices. Circulation records are maintained at Reed Business Information, 8878 South Barrons Blvd., Highlands Ranch, CO 80129-2345. Telephone: 303/470-4445. POSTMASTER: send address changes to PACKAGING DIGEST®, 8878 South Barrons Blvd., Highlands Ranch, CO 80129-2345. Publications mail agreement No. 40685520. Return undeliverable Canadian addresses to: RCS International, Box 697 STN A, Windsor, Ontario N9A 6N4. E-mail: [submail@reedbusiness.com](mailto:submail@reedbusiness.com). Rates for non-qualified subscriptions, including all issues: USA, \$92.90 1-year, \$158.90 2-year; Canada, \$133.90 1-year, \$228.90 2-year (includes 7% GST, GST#123397457); Mexico, \$123.90 1-year, \$210.90 2-year; foreign surface, \$174.90 1-year, \$298.90 2-year; foreign air \$226.90 1-year, \$402.90 2-year. Except for special issues where price changes are indicated, single copies are available for \$10 USA and \$15 foreign. Please address all subscription mail to: PACKAGING DIGEST, 8878 South Barrons Blvd., Highlands Ranch, CO 80129-2345.

**Printed in USA**

Reed Business Information does not assume and hereby disclaims any liability to any person for any loss or damage caused by errors or omissions in the material contained herein, regardless of whether such errors result from negligence, accident or any other cause whatsoever

Vol. 44 No. 8

# Print Apply Labeling Tamp or Blow Starting at \$6995

**OPTIONAL ACCESSORIES**

- CORNER WRAP LABELING
- ADJACENT PANEL LABELING
- CONVEYOR SYSTEMS
- BAR CODE VERIFICATION
- RFID ENABLED PRINTERS



3101 Industrial Avenue Two  
Ft. Pierce, FL 34946

1-800-634-5376

[www.autolabe.com](http://www.autolabe.com)

**Models C-50  
& C-100****Stand-Up Pouch  
Capabilities**

LAMINATE OR POLYETHYLENE

*Compact in size, these high-speed form/fill/seal packaging machines feature exceptional precision and reliability, along with quick-change features for versatile operation.*

- high speed C-50: 50/BPM; C-100: 100/BPM
- fast, automatic sealing of bags
- variety of products — automotive, food, electrical, pharmaceutical, toiletries, and more
- easy maintenance and quick change over for minimum down time
- economical to operate — lower power consumption
- servo drive system



A Division of B & M Industries, Inc.

Telephone: 813-754-9960 • Fax: 813-754-9321

E-mail: [bodopak@worldnet.att.net](mailto:bodopak@worldnet.att.net)

[www.bodolaypackaging.com](http://www.bodolaypackaging.com)



# CVC Technologies Inc.

*"Leading Global Packaging Equipment Supplier"*

*Be a Part of the  
CVC Technologies Inc.  
Success Story!*

**Quality  
Value  
Service**

**CVC Premier Dealer**  
Labeltronix Inc.  
Corporate Office  
1097 North Batavia St.  
Orange, CA 92867  
800.429.4321 Phone  
800.419.1555 Fax  
[www.labeltronix.com](http://www.labeltronix.com)

**CVC Technologies Inc.**  
10861 Business Drive  
Fontana, CA 92337  
909.355.0311 Phone  
909.355.0411 FAX  
[sales@cvcusa.com](mailto:sales@cvcusa.com)  
[www.cvcusa.com](http://www.cvcusa.com)

**East Coast Office**  
2400 Main Street Ext.  
Suite 8  
Sayreville, NJ 08872  
732.316.5200 Phone  
732.316.9191 Fax

**LABELERS  
TABLET PRESSES  
LIQUID PACKAGING LINES  
TABLET/CAPSULE PACKAGING LINES  
POWDER PACKAGING LINES  
BLISTER PACKING MACHINES  
END OF LINE PACKAGING**

**TAIWAN**

**USA**

**ITALY**

**RUSSIA**

**CHINA**



# Fast relief from

# nozzle congestion.

Our customers keep telling us they breathe easier because EASY-PAC Package Sealing Solution has the lowest operating temperature at just 200°F, and that means nozzles stay clean and char-free. With clean nozzles you'll benefit from reduced downtime, maintenance and overall cost in use. But that's not all. When you purchase EASY-PAC adhesive you get an entire Package Sealing Solution that includes a

- Char-free, 200°F hot melt
- New hot melt application system
- Integrated Auto-fill system
- Convenient storage bin
- Replacement parts guarantee

And, there's no capital expense for you to get the complete package.

EASY-PAC also comes with the promise that you'll achieve:

- maximum packaging uptime
- lowest cost in use sealing
- hassle-free sealing, and
- premium operator safety

EASY-PAC Package Sealing Solution...it's a breath of fresh air. Call us today for all the facts at **1-866-266-5565**.

**National Adhesives**

**10 Finderne Avenue, Bridgewater**

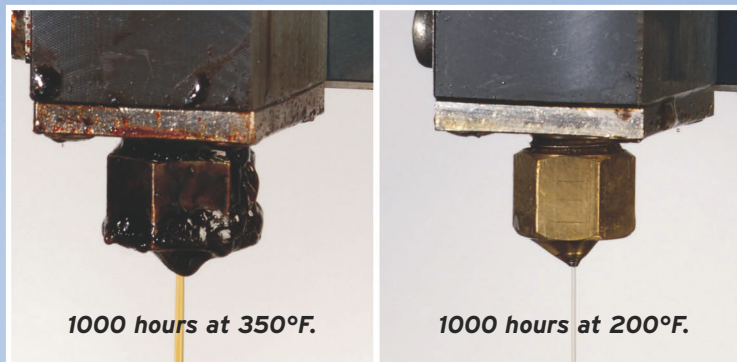
**New Jersey 08807-3300 USA**

**Tel: 1-866-266-5565 Fax: 513-683-5310**

**Internet: [www.myeasypac.com](http://www.myeasypac.com)**

**See us at PACK EXPO Booth #S-3066**

**National Adhesives**  
A National Starch & Chemical Business



1000 hours at 350°F.

1000 hours at 200°F.

**Eliminate the primary cause of  
downtime with the EASY-PAC™  
Package Sealing Solution.**