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S global closure systems



Growing Markets for Household Goods in Asia

SC Johnson works with GCS to win share as markets grow by as much as 30%



The market for household products in Asia is booming. Fuelled by population growth plus a burgeoning middle class, products for home care are seeing double-digit growth. Zeller Plastik is serving the region from a number of locations and is working with customers to serve rapidly growing markets in the region. SC Johnson is one Zeller customer that is winning more share in household products through greater innovation.

SC Johnson has worked with Zeller on two of its aerosol brands, Raid for the Chinese & Korean markets and Pledge Leather & Wood Care for the Chinese market. Designing a cap that was durable, easy-to-use, and safe for customers was the challenge. Of course, accomplishing that combination cost effectively was also a goal.

Zeller has produced a one-piece aerosol cap for Raid. Special selection of the material grade was necessary to ensure the product doesn't crack during transportation and also to prevent the plastic from breaking on impact or deforming when exposed to high heat. The cap also features reinforced ribs further strengthening the integrity of the cap. This is important as many of the products face long truck shipments after leaving the plant. This cap is helping SC Johnson take full advantage of the growing market for bug sprays in the region. The population is moving away from powders and incense and bug spray sales are seeing increases at a rate of 30% per year.

"Durability during transportation is important to our customers," said Aaron Goh, General Manager, Zeller Plastik, China. "As China's economy grows, so does its road network. Our cap will face many extremes before it reaches the final consumer and it is essential that our product can withstand this."

This one-piece design of the Raid cap also helps SC Johnson simplify its assembly process. But the process for making a one-piece aerosol cap is anything but simple. Zeller created a complex mould design which forms a very narrow spray channel (<1mm) at a 90-degree angle. This cost-effective solution is important for keeping a powerful yet controlled spray that stays out of contact with consumers as they use the product.

For SC Johnson Pledge Leather & Wood Care, Zeller employed a different type of design using 2-piece assembly. For this cap, Zeller produced a hollow cap that easily fits the assembly piece and spray nozzle.

"These two applications represent a good example of our working partnership with SC Johnson," said Goh. "Combining our knowledge of technology with the customer's product and geographic needs, allows us to build business based on a growing trend."



Greetings!

This issue of *DisClosure* focuses on the household and industrial market. With an increase in DIY products, growth in Asia, and more product diversity, this area of the marketplace is definitely on the move. As with any growth market, GCS and its affiliated companies are working with customers to differentiate and innovate ahead of evolving trends.

As products for this market become more brand conscious, we are helping by offering new shapes and sizes of our closures as well as working with customers to develop custom solutions. It is this combination of service, forethought and technological know-how that helps brands succeed in these growing but competitive areas.

You'll also read throughout this issue, how we are working with customers to reduce impact on the environment. This is an area that we are continuing to pay close attention to. We are working with customers to reduce materials, shipping weights, and create packaging solutions for new, more environmentally friendly products.

Finally, be sure to visit our new website at gcs.com. It is designed specifically to help you understand our products and services more fully and features a new, enhanced product catalogue. Stop by gcs.com and let us know what you think!

As always, we appreciate your ongoing business and look forward to working with you in the future.

Sincerely,
Chris Harrison
CEO,
Global Closure
Systems



product design - mass production



Top Trends

Synergies and Differences in Household and Industrial Closures

Industrial and consumer products have obvious and different requirements when it comes to packaging. Yet the two arenas also share some synergies. Closure technologies are a vital part of safety, security and convenience in both areas. Hervé Chevalard from GCS company Astra Plastique, discusses some of the trends in the household, industrial and agro chemical markets that are impacting packaging choices and considers new closure technologies that are helping suppliers meet consumer demands, government regulations, and global trends.

What are some of the trends in household and industrial packaging that are answered through closures?

There is a combination of trends all coming to fruition at virtually the same moment.

First there is a greater demand for convenience – a package has to be easy-to-open, easy-to-close, and easy-to-dispense. Somewhat paradoxically, there are also greater industry standards for child safety that make it more difficult to open a package. The result is that child safety mechanisms must be much more sophisticated to be both safe and convenient.

In addition, there is a drive within the industry to make lighter weight packaging that uses less material. There is also an overall reduction in solvent materials. Non-solvents are very aggressive towards plastic so designing toward that trend is necessary. Overall, there is a call for greater innovation to answer these changing and sometimes contradictory needs in the marketplace.

In the industrial arena there are some of the same changing needs but of course the requirements and technologies are much different. In the industrial arena, chemicals are very aggressive and are shipped in larger quantities. Also there is an array of transportation and trucking regulations throughout the world that need to be complied with. In this arena we are dealing with more aggressive products that are being transported in larger amounts so, for the closure, it's more about durability than convenience.

GCS's divisions Astra Plastique, UCP and Zeller Plastik are all present in the household and industrial markets with caps that are both different and complementary. Astra Plastique has answered this call for innovation in the household and industrial goods marketplace with products like Industop, Safetop and Super Safetop. The latter featuring UCP's Clic-Loc technology which is one of the best child resistant devices currently available on the market.

What do you think your customers are looking for in closures for household goods?

As I mentioned before, service can be very important. Product formulations as well as government regulations are changing rapidly for household goods. We've found that our customers value guidance in creating a package that will offer the right balance of safety, convenience, and economics. Being part of GCS helps because it gives us a broad base of global knowledge. At the same time, the long history of Astra Plastique, UCP and Zeller lets us tap into some deeper regional and technical knowledge.



Code: 2247
Safetop



Code: 2500
Super Safetop



Code: 1988
Industop



Code: X970
Clic Loc



Code: X988
Medi Loc



Code: 1815
Turn Lok

In terms of household goods, what are some trends that are impacting the market?

Trends in closures for household goods are really being led through the kitchen. Convenience features that consumers have seen in food and beverage items are beginning to migrate to household items. Brand managers are adopting features that make products easier to open and close as well as dispense.

Our experience at Astra Plastique and through GCS in the food and beverage market is extremely valuable for this reason. We can work with our customers to determine the features they would like to adopt and then, of course, work on adjusting those features to the particulars of household goods.

We're even seeing opportunities in the consumer automotive maintenance market. These are products that traditionally haven't been as concerned about spillage or consumer convenience. Today, products are differentiating themselves through these types of features.

Concern for the environment often comes back to packaging. How do closures for household goods fit into that equation?

The environment is a complex issue and we've found that companies serving this market are approaching the environment from two angles. One is a call to reduce packaging materials in order to reduce shipping weights and actual material consumption. In the household goods and industrial chemical markets, concern for the environment is also impacting the types of material actually being packaged. In Europe, for example, fewer solvents are being used. As I mentioned earlier, the replacements for solvents, while less harmful to people, animals and the planet, are very aggressive towards plastic. Ensuring that closures work effectively with the product is essential to it being shipped safely, as in the case with industrial chemicals, and used safely and effectively at home in the case of the consumer.

A good example of how closures are impacted by non-solvents is that many of these materials actually "breathe". In many cases we are working with manufacturers to create closures that can breath gas, but, of course, maintain their liquid seal integrity.

Overall, care for the environment, when it comes to household goods and industrial chemicals, is vastly more complicated than simply reducing packaging, and involves a complex balance of satisfying consumer, legislative and environmental requirements.

Overall, what do you think the biggest trend in closures is and will be over the next few years?

Definitely child resistant closures. Obviously the industry is interested in making their products as friendly to the home as possible. CRCs are essential to providing a safe environment to raise children whilst using everyday household products that can be quite harmful.

The GCS divisions Astra Plastique, UCP and Zeller Plastik are constantly developing new technology for this area of the market. The Clic-Loc, Mediloc, Safetop, Super Safetop and Turn-Lok closures incorporate some of the most advanced forms of child safety and tamper evidence today. With all of our products it is our goal to introduce technologies that meet the CRC standards required by law. We work with our customers to ensure that these closures are applied correctly in conjunction with other packaging elements leveraging our knowledge and industry partnerships. As regulations throughout the world evolve, these partnerships will be vital to growing business in the arena of household and industrial products.

Packaging Becomes the Product

Unique package design 'O'Cedar Floor Polish' from Reckitt Benckiser redefines packaging convenience

Reckitt Benckiser is a leading consumer goods company serving markets all over the world with an array of household, health & beauty, and food products. Consumers have long and trusting relationships with Reckitt Benckiser household brands such as Lysol, Harpic, Easy Off, and O'Cedar. In fact the company ranks as no. 1 in surface care products worldwide.

In order to maintain its leading position and to keep these brands fresh in the marketplace, the company leverages the power of packaging to offer consumers new perspectives on its products while maintaining the integrity of brands that consumers have used for years, or even decades.

The company recently launched new packaging for its O'Cedar brand of floor polish in France. Reckitt Benckiser went beyond usual packaging design alterations and completely rethought the consumer's relationship with O'Cedar floor polish. By melding packaging and product functionality in a triangular bottle that can be used as a floor mop, Reckitt Benckiser is offering greater convenience to consumers and is redefining how floor polish is purchased and used by consumers.

The team at Reckitt Benckiser worked with Zeller Plastik Germany and Zeller Plastik Poland to create a triangular plastic bottle containing the product during transportation and at point of sale. When the consumer uses the product at home, the bottle, which also features an integrated valve and sponge foam, can be fastened to a standard broom handle and used as a floor mop. Reckitt Benckiser is marketing the product as O'Cedar Cireuse Express.



By offering consumers this new way of using O'Cedar, Reckitt Benckiser are extending the brand experience to all aspects of how it is used around the house as it offers greater convenience but it also builds a stronger relationship with consumers.

The package answers a combination of trends in the marketplace. Consumers are increasingly looking for greater convenience, cleanliness, and disposability as well as ways to simplify household storage.

The O'Cedar Cireuse Express all-in-one package is able to answer this combination of needs by containing and controlling the product during use and minimizing contact with consumers'

hands. It also reduces storage for sponge mops and cloths and enhances product results by ensuring that the applicator is always fresh.

The success of the new O'Cedar packaging depended on several design elements working in harmony as consumers use the product. An all-in-one floor-polishing package needed to fit in corners and be easy for consumers to maneuver. At the same time, the package had to be durable over the course of many uses.

Reckitt Benckiser had to enter the mind of the consumer and see how they could not only substitute the mop or cloth, but improve on it. With the O'Cedar package, Reckitt Benckiser found they could answer consumer needs previously outside their reach – needs such as, more even dispensing of the product, having a fresh way to apply the product, protecting walls and furniture, and eliminating the need for excess mops and rags. The development team used a holistic approach to the packaging design, looking at the challenges consumers faced and answering many of them in an all-in-one package design. Relying on its strong partnership with Zeller and GCS, Reckitt Benckiser was able to redefine the usual requirements of packaging.



"Working with Reckitt Benckiser on this project extended our own thinking about what packaging was and how consumers would interact with the product," said Margret Koehn, Key Account Director for Reckitt Benckiser. "Traditional packaging takes into account the

transportation of the product, point of sale, and how consumers open, pour, and close a product. With O'Cedar, we had to throw away the 'open – pour – close' model and enter the design process with fresh eyes."

The O'Cedar floor polish product has been a success in France. The package design is also a preview of a growing trend of packaging that becomes the product. For Reckitt Benckiser it is one more way the company can keep existing brands fresh in the minds of consumers.

Constant innovation is key to the success of Reckitt Benckiser's brands worldwide. The leading consumer goods company continues to work with partners like GCS to bring together packaging and product innovation so that they work in tandem. This enables Reckitt Benckiser to truly differentiate its products on the marketplace bringing value to consumers by answering their need for greater convenience.

Spotlight on New Trigger Pumps

APTP OPEN DESIGN



- Based on the proven technology and same engine principle as our current classic version.
- Combines a new and modern design with an ergonomic function.
- Offers product improvements, such as a lower actuation force, a more consistent spray pattern, and improved handling.
- Two planned distribution options: Spray nozzle or Foam nozzle.

APTP SECURE



- New development of a child resistant trigger pump based on the existing body engine of our aptp basic version.
- Combines proven quality with the demand for a child resistant pack.
- The child resistant feature is achieved thanks to a modified two-piece nozzle (squeeze and turn principle) and the existing ratchet closure.
- Available with or without foaming device.
- Ideal for garden and household products, especially for those with new and more aggressive product combinations.
- Certified according to ISO 8317.

APPLICATIONS

- ✓ Kitchen Cleaner
- ✓ Hair Care
- ✓ Degreaser
- ✓ Wheel Cleaner
- ✓ Barbecue Cleaner
- ✓ Oven Cleaner
- ✓ Shower Cleaner
- ✓ Textile Refresher
- ✓ Ironing Aid
- ✓ Stain Remover
- ✓ Mildew Remover
- ✓ Animal Care
- ✓ Disinfectant Sprays
- ✓ Pesticides
- ✓ Insect Killer
- ✓ Fungicides
- ✓ Outdoor Plastic Cleaner
- ✓ Upholstery Cleaner
- ✓ Air Freshener

Triggering Innovation Q&A with Manfred Kluth

Trigger pumps are a standby closing and dispensing system for many household and gardening products becoming, over the years, a familiar, trusted household staple. New technologies, however, are taking this familiar closure to new levels in terms of visual impact and usability. Manfred Kluth, Sales & Marketing Director for Zeller Plastik Germany & Eastern Europe, talks about how these new technologies are impacting the market and what new opportunities may be available to designers and brand managers with the next generation of trigger pumps.

Trigger pumps have been widely used in the marketplace for over 15 years. What is new and different today?

Today, trigger pumps are widely used in many applications and many manufacturers supply trigger pump technology and compete mainly on price. However, there is another segment of the marketplace occupied by brand owners who want to differentiate their brand. They are not just looking for the same trigger pump used by their competition – they want something that is new and different, yet still cost effective.

Household products in general have become more image conscious and compete with increasingly distinct branding. Branding for cleaning products, lawn chemicals and insecticides have become more aggressive in terms of shaped containers, vibrant graphics and even a stronger investment in advertising. In addition, more new products are entering the market making it increasingly diverse and challenging – so differentiation is key. Also, today's retail environments offer consumers a very diverse packaging landscape and to stand out, brand owners want to change more than the colour of a label; they want new shapes and coordinated vibrant colour schemes.

Convenience is also a big trend in just about every consumer goods category; for household goods it is even more acute. For trigger pumps, convenience has always been a part of the DNA, so to speak. A trigger pump is, by definition, a convenient, reliable way of dispensing a product evenly and safely. But there are ways of improving on trigger pump design to enhance convenience. It is definitely an area where technologies are evolving.

In addition to technology, delivery times can be crucial. Many brand owners are concerned about time to market and quick turnaround on orders. For this reason, we implemented *System 24* in which Zeller has certain standard pumps in stock and available within 3 days.

What are some of the trigger pump enhancements in convenience?

There are two key elements to enhancing convenience in trigger pumps. First, we can make products easier to dispense and second we can offer better control and more options of dispensing the product. For example, GCS developed a new line of aptp trigger pumps that has a more ergonomically shaped handle and trigger. This is a basic first step that makes the product easier to hold and use. The weight supported by a hand using a trigger pump product could be in excess of 1 Kg. That's a significant amount of weight and potentially uncomfortable or even prohibitive to using the product. For these reasons ergonomic design is essential to the continued evolution of this technology.

From there, we also designed the trigger action to be smoother and with a sharper cutoff to reduce spillage. The result is a smoother and cleaner experience for consumers using the product. Finally, by offering both spray and foam options, brand owners can give consumers more choice in how they prefer to use a product. In fact, one of the main differentiators of GCS/Zeller is in the quality of the foam produced from our trigger pumps. It's widely considered the best in the industry. This can be particularly important in household products where consumers are really using the trigger pump as a tool in their home and garden. How the trigger pump performs is as important as how well the product cleans, kills weeds, or whatever else it's designed to do. The more we can enhance the delivery tool, the better a consumer's brand experience will be.

What are some ways that product designers can differentiate products using trigger pumps?

If you look at products using trigger pumps on the market, there is often quite a bit of differentiation in the bottle but not in the pump itself. Using different colours and shapes for the trigger pump can alter the product profile and differentiate a product both on the shelf and in the consumers' home.

Don't all trigger pumps basically look the same? Is there much selection in colour and shape for a designer to choose from?

Trigger pumps need to be standard to perform reliably and to be cost effective. However, this reliability also must balance with choices for designers and brand managers in terms of shapes and colours. New concepts for trigger pumps include a modular system of parts to offer a choice of different colours to use in those part combinations. So there is a two-piece shroud for a two-colour combination as well as two-colour options on the trigger itself. This modular approach is a good way of cost effectively differentiating products as well as creating product 'families' that can share a colour scheme.

What are some of the challenges to changing the design of trigger pumps?

Trigger pumps are a widely used and reliable standard in the industry. In fact, at Zeller we have delivered over 2.5 billion trigger pumps to date worldwide. While new and different designs are important, evolution cannot be so dramatic that it is disruptive to production or consumers. For this reason, GCS developed the aptp open design. The challenge that we gave our own design team was to offer the market something new but to base the new trigger pump on the same 'engine' that has been so successful thus far. The basic parameter of the new design was that it should significantly alter the look and feel of the product, but fit within the same shroud profile and into existing production seamlessly. We also wanted to offer our customers a 'construction kit' model so they could choose elements from a standard supply. In this way we're offering the industry new ways to differentiate product without the need to radically alter production.

Is child resistance a consideration in trigger pumps?

Yes. Many household products can be harmful if swallowed or sprayed on the skin. Also there are more potentially harmful chemicals being used in household products today, particularly in Europe. A child resistant feature is now available through the new aptp secure line. This line offers the same design and ergonomic advantages of our other new products with the addition of a child resistant mechanism in the pump itself which is activated by squeezing and twisting the nozzle. The aptp secure obtained the confirmation of conformity after a formal test procedure ISO 8317 (2003) and can be designated as child-resistant and suitable for adults.

Are there new applications that typically have not used trigger pumps in the past?

Yes. Brands have become more creative in general so applications such as health and beauty products are beginning to enter the market with trigger pumps. These applications are finding that trigger pumps not only give a product a new look but are also convenient for customers.

Many of the changes you've described are significant. Is this the next generation of trigger pumps?

Trigger pumps have, in a way, been a victim of their own success. They are a reliable standard that customers know and like, but don't necessarily see as new and different. As brand managers begin to search for more product innovation, a reliable standby seems less appealing. We felt that we needed to drive our own innovation and show the industry a new fresh take on the technology. So, yes, this next generation of trigger pumps looks at more ergonomic designs, offers better spray control, and gives more choice to designers in terms of colours and shapes. I think that you'll see more premium products with these kinds of trigger pumps in the household goods market and may even see more designs emerge in the health and beauty market using this technology.



Manfred Kluth

Sales and Marketing Director
for Zeller Plastik
Germany and Eastern Europe

GCS Reaches Out Online

GCS is reaching out to the industry via the Internet with the launch of two important initiatives online. The company has updated its website to offer an enhanced product catalogue as well as market based browsing. In addition, GCS has joined Webpackaging.com, a leading web portal and resource for the packaging industry.

"The Internet is an important resource for our customers and prospects," said Helen Spottiswoode, Sales & Market Development Manager, GCS. "These two new initiatives enhance our service to customers, by offering them easy access to resources to help them make an informed buying decision."

New Look, New Resources

The new gcs.com offers users market based searches, visual browsing capabilities, an online pressroom, and a



downloadable version of the GCS quarterly newsletter DisClosure.

"It was important that we offer our customers a useful tool that enhances their overall understanding of GCS and builds on the personal service we offer," said Spottiswoode, GCS. "Although our previous online catalogue was extensive, our customers can now easily browse through photographs of our products and learn about features through our at-a-glance icon system."

Webpackaging, which GCS joined earlier this year, features the latest news from the company as well as thought leadership articles on trends in the industry and customer success stories. In addition, the portal hosts another fully searchable GCS product catalogue, organized by closure type.

"Webpackaging is a forum where customers and prospects are making informed buying decisions," said Spottiswoode, GCS. "We definitely want to be part of that platform and

offer our own perspectives on market trends as well as comprehensive information about our product range."

Webpackaging.com was started over ten years ago as a focused resource for packaging decision makers looking for reliable information on products and services. The site features news and features from the industry as well as a comprehensive searchable packaging database.

"We are delighted to have GCS on board and look forward to growing with them in the future," said Duncan Briffett, Operations Director at WEBpackaging. "As a new company with long established brands, it's a smart strategic move on GCS's part to leverage the power of internet searches where decision makers are gathering credible information for key buying decisions."

Diversified Distribution

These web initiatives also enhance and diversify how customers can access information on GCS. The new site outlines markets that GCS serves such as Pharma, Toiletries, Food, Beverage, Household/Industrial, as well as Wine & Spirits. Customers can learn more about closure technologies and trends in these markets or search in more detail for exact products and specifications.

The site also incorporates an electronic version of the GCS customer newsletter *DisClosure* as well as an online pressroom. The newsletter, which has been in circulation with GCS companies for over 6 years, provides news, customer profiles, and industry insight. The print version of *DisClosure* will continue to remain in circulation, distributed four times a year.



"Adding an e-newsletter component to the site was important to us," said Spottiswoode. "While we feel our customers value a paper format, an additional electronic version allows us to reach a larger audience and provides our customers with an effective tool for wider internal distribution."

'Easy' Fabric Conditioner Closure From UCP



UCP has designed and produced a new general trade 58mm Fabric Conditioner dosing cap in conjunction with Powder and Liquid Products (PLP) of Consett, County Durham. This will be used by the laundry and household cleaning products manufacturer for its 'Easy' brand of fabric conditioner in 2 litre packs as well as private label products.

'Easy' is targeted at value-seeking consumers and offers superbly presented products at keen prices. PLP reports that 'Easy' has excellent distribution throughout the U.K. and Ireland and is available in cash & carries, wholesalers and most high street discount stores, where the product range has a significant market share, a proven high rate of sale and generates excellent footfall for stockists.

The PP Homopolymer closure was designed at UCP's Norwich plant and features narrow ribs around the top of the cap to aid grip blending into a wave profile in contrasting gloss, which continues into the skirt of the cap for a pleasing aesthetic effect. As well as being compatible with existing containers, the closure is manufactured to a high quality standard to achieve customer capping line efficiencies. UCP already has a significant share of this market, supplying the bulk of closures used by the U.K. contract fillers. The new standard closure provides an excellent alternative when custom tooling cannot be justified. The 58mm dosing closures are currently available in ten colours to suit all variants in fabric conditioner product ranges.

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