28th DuPont Awards for Packaging Innovation

DIAMOND AWARD

ThermaSet® Blow Molded PET Container for Hot Fill, Pasteurized Food
Graham Packaging, USA

Graham Packaging was named the Diamond Award winner in the 28th DuPont Awards for Packaging Innovation for ThermaSet®, a blow molded PET container for hot fill, pasteurized food. It was honored for Technological Advancement, Responsible Packaging and Enhanced User Experience. Consumer goods companies have been seeking a package that significantly reduces shipping, breakage and other manufacturing costs, and that responds to retailer requests for a more environmentally sustainable product with lower greenhouse gas emissions and a reduced carbon footprint. The innovative ThermaSet® technology manipulates the morphology of PET, creating a container with properties far beyond those of standard PET: thermal stability above 300°F, 50% greater sidewall rigidity and a 25% increase in oxygen barrier. ThermaSet® is a lighter weight, shatter resistant, drop-in replacement for glass on high temperature fill lines, allowing for the use of existing manufacturing assets while retaining the universally preferred metal lug closure which indicates quality and freshness. The reduced wall thickness results in a narrower jar that frees up valuable shelf space and provides the consumer with a safer package which is easier to handle, use and recycle. In fact, the jar is 100% recyclable as PET code 1. ThermaSet® offers retailers and brand owners high-clarity, rigid plastic containers that remove breakage, downtime and cost along the supply chain, while increasing convenience for the consumer.

DIAMOND FINALIST AWARD

Daisy Squeeze-Flexible Pouch for Daisy Brand Sour Cream
Aptar Food + Beverage, USA

Aptar Food + Beverage partnered with Daisy Sour Cream to create the Daisy Squeeze-Flexible pouch, which was recognized as a Diamond Finalist winner in the 28th DuPont Awards for Packaging Innovation. With its inverted, wedge-shaped pouch with an innovative flip-top dispensing closure, Daisy Squeeze represents an outstanding accomplishment in packaging innovation across all three award criteria: Technological Advancement, Responsible Packaging and Enhanced User Experience. The self-sealing valve-in technology coupled with the ring pull fitment seal, custom flip top closure and robust film structure work effectively together as a total packaging solution. The Daisy Squeeze package helps eliminate risks of contamination from dirty utensils, minimizes wasted product and provides an easy-to-control and drip free dispensing system, all while fitting easily into refrigerator doors for easy access. The competition judges were especially impressed with the stand-out design and shelf appeal created by the novel pouch shape and dispensing cap. Its unique combination of format and design, an easy-to-dispense concept, and minimization of material usage makes it a real standout in consumer food packaging.
**Lightweight Square-Shaped Edible Oil Bottle & Cap**

*Adani Wilmar, Ltd., India*

The lightweight, square-shaped Edible Oil Bottle and Cap from Adani Wilmar (Fortune Brand) was recognized as a Diamond Finalist winner in the 28th DuPont Awards for Packaging Innovation. Exhibiting excellence across all three award criteria -- Technological Advancement, Responsible Packaging and Enhanced User Experience, the square-shaped bottle replaces an oval container, making it more environmentally responsible by maximizing cube efficiency and shelf space. The conversion from a round to a lightweight square bottle also reduces production costs by about 60% and logistical costs by about 15%. The elimination of manual shrink labeling in favor of an inline roll fed label application increased production efficiency and gave the container a more premium look. The diamond-faceted decoration enhances shelf appeal and also offers more ergonomic handling for consumers. Even though lighter in weight, the square-shaped bottle offers equivalent or greater strength. Adani Wilmar has achieved an enriched user experience with the new look, while providing savings on the production line...a win-win for brands.

**TeaBrewer/CoffeeBrewer - Premium Whole Leaf Tea/Coffee Brewing System**

*Coffeebrewer Nordic A/S, Denmark*

Demonstrating excellence across all three awards criteria -- Technological Advancement, Responsible Packaging and Enhanced User Experience, the Teabrewer/Coffeebrewer from Coffeebrewer Nordic A/S was recognized as a Diamond Finalist winner in the 28th DuPont Awards for Packaging Innovation. The design team developed a form fill seal horizontal packaging machine for a stand-up pouch that operates with six different materials and turns paper laminate into the vessel for the products. With a practical use design and innovative labeling, it clearly captures attention and enhances user experience, offering premium quality, convenience and customization for on-the-go, personalized tea infusion or coffee brewing. The coffeebrewing system combines the richness from a French press and the finer filter taste profile from a pour-over and the teabrewer design allows natural whole leaf infusion teas to be steeped, resulting in almost exactly like that known from a good old teapot. The choice to omit any use of metals in the packaging materials, the shift to wind power generated energy, and the pouch’s reusability represent a highly advanced sustainable profile. The small scale, pour spot, stand-up pouch and effectively designed front labels with on-pack messaging come together to create a positive user experience.

**Printed Coldform for Doril Enxaqueca Medicine**

*Bemis Latin America, Brazil*

Bemis Latin America was named a Diamond Finalist winner in the 28th DuPont Awards for Packaging Innovation for their printed coldform for Doril Enxaqueca medicine. Exhibiting excellence in Technological Advancement, Responsible Packaging and Enhanced User Experience, Doril Enxaqueca is the first product to use coldform printed locally in Brazil. With the printed coldform, the entire area of the package, including the formed bubble that accommodates the medicine, can be used for product communication, creating greater exposure of over-the-counter products. The new package also reduces production time and offers a more competitive price to pharmaceutical manufacturers. The use of new special inks in the formed bubble helps resist stretching of the material at the time of the cavities’ formation, eliminating cracking and printing with distortion. As a result of the printable area and coldform protection, the product does not need a folding box, reducing the amount of packaging in the supply chain, further allowing a more competitive price for pharmaceutical manufacturers.
Amcor Rigid Plastics earned a Diamond Finalist award in the 28th DuPont Awards for Packaging Innovation for their Method Liquid Laundry Detergent 53-ounce PET post-consumer recycled bottle. It was honored for excellence in Technological Advancement, Responsible Packaging and Enhanced User Experience. This package is made from 100% post-consumer recycled PET and manufactured using renewable energy. Method’s 53-ounce sleek, transparent and custom container delivers strong shelf appeal and has broken ground in a market predominantly limited to opaque high-density polyethylene (HDPE) containers. Amcor Rigid Plastics worked through challenges with the container’s neck design, spout closure and hand grips, ultimately creating a unique and sustainable design that could be stretch blow molded with a consumer-appealing hand grip. The ergonomic design allows easy grip and pouring and comfortable lifting of the heavier bottle. The new post-consumer recycled PET packaging meets high standards for sustainable packaging, including a 35% lower carbon footprint and 78% lower life cycle energy consumption than a virgin PET alternative.

NIKE Inflatables 2015/2016 Packaging Redesign
OIA Global, USA

OIA Global was named a Diamond Finalist winner in the 28th DuPont Awards for Packaging Innovation for their work on the NIKE Inflatables 2015/2016 Packaging Redesign. Exhibiting excellence across all three award criteria – Technological Advancement, Responsible Packaging and Enhanced User Experience, OIA Global incorporated origami and geodesic design elements into an invention that simplifies complexity, improves productivity and exudes creativity. The unique “Prizm” design consists of a series of ten alternating equilateral triangular panels that when formed, the antiprismatic band creates an open geodesic socket that allows the ball and packaging to hold onto each other naturally, with minimal material, high product visibility and an intuitive reusable latching mechanism—all achieved with conventional corrugated fiberboard and a simple folding-gluing process. The final product demonstrates advancement in the packaging of sports balls while reducing cost, minimizing carbon footprint, enhancing product appeal to consumers, and elevating the brand to stand out among its competition.

LEADERSHIP IN INNOVATION AWARD

MGI 3D Digital Package Decoration Process
MGI, USA

MGI is the recipient of the Leadership in Innovation Award in the 28th DuPont Awards for Packaging Innovation for its ground-breaking, cutting-edge excellence in 3D digital print packaging technology. MGI’s digital spot UV and hot foiling technology offers the ability to produce personalized embossed foil and decorative special effects via variable data and can be produced on runs ranging from one to 100,000 with the same setup. Digital packaging has catapulted to the forefront of decoration methods for its ability to offer personalization and customization, and it is on the cusp of emerging as a cost-effective alternative to flexo, gravure, and offset for short, medium, and extended runs. Requiring no screens and no dies, MGI’s innovation gives brand owners the opportunity to cost-effectively add enhanced graphics to labels, cartons, or even printed collateral in both an on-demand and variable data manner. This technology allows regular 2D spot UV varnish coats, 3D embossed textured effects and variable data embossed foils all to be printed on the same machine in one pass. It represents the next-generation of digital package decoration at a time when most digital print technologies are focused on general print quality.
GOLD AWARD

Water-Based Retortable Sauce Pack
Pulmuone Company Ltd., Korea

The Pulmuone Company was named a Gold Award winner in the 28th DuPont Awards for Packaging Innovation for the development of a commercial, water-based adhesive for retortable pouches, a first-known application in the industry. Honored for excellence in Technological Advancement and Responsible Packaging, they overcame a temperature limit of 266 degrees Fahrenheit for water-based adhesive for retort. This improves packaging material safety by reducing organic solvents in expanded applications. A significant advancement, particularly for today’s discerning consumers, it assuages users who are concerned about possible organic material extraction at the high temperature procedure required for packaging retort products. The Pulmuone Company also displayed their commitment to sustainability by not only reducing organic solvents but also cutting carbon dioxide emissions.

SYNEK Beer Cartridge Pouch
Mondi Jackson, USA

Mondi Jackson earned a Gold Award in the 28th DuPont Awards for Packaging Innovation for their innovative new Beer Cartridge Pouch, produced for the dispensing company “Synek”. Exhibiting excellence in Technological Advancement and Enhanced User Experience, the pouch can be filled with craft brewed beer either at a pub or from a home brewing system, maintaining freshness and carbonation for up to 30 days. The Beer Cartridge Pouch has a proprietary, multi-layer barrier structure to extend the shelf life of the product and offer increased puncture resistance. Also, this package offers 100% UV-protection, is leak-proof, vacuum-sealed, and sanitary/purged every time it is used. While it withstands 25+ PSI (it will off-gas if over-pressured), there is also zero impact on flavor/taste, as all materials are FDA-approved, chemically and double blind taste tested. The pouch also includes great on-package communication that provides both graphic and witty text cues that make it easy for the user to couple the pouch to a home dispensing system. The only standalone flexible packaging that can withstand the high pressures of beer, the Synek pouch performs just like a keg but ships and stores completely flat, weighing a mere 0.16 pounds, reducing shipping and storage costs and reducing warehousing. The filled cartridge remains chilled at a predetermined temperature and pressure thus providing the beer with an outstanding shelf life. The flexible structure allows breweries to fill and transport their beer virtually oxygen-free, providing the best quality when being dispensed at home. Mondi Jackson is part of Mondi Group, an international packaging and paper producer, employing around 25,000 people across more than 30 countries.

Formpack® Ultra Blister Packaging
Amcor Flexibles, Germany

Representing a significant advancement in packaging for the healthcare industry, AMCOR FLEXIBLES’ Formpack® Ultra earned a Gold Award in the 28th DuPont Awards for Packaging Innovation, honored for excellence in Technological Advancement and Responsible Packaging. The intelligent material engineering simultaneously reduces production costs, improves performance and extends product shelf life and stability...all without impacting the current supply chain of existing hardware on the packaging shop floor. Its unique blister cavity design can be elongated more than standard cold form packaging, ultimately allowing for either a smaller blister card design or for the addition of more cavities without increasing blister card size. It also improves the barrier for sensitive (moisture/oxygen) drugs by using the space gained from the reduction in blister size for increasing the seal width. Formpack® Ultra provides enhanced functionality with less material, lowering the package’s carbon footprint, and offers better portability. The cold form blister package makes it possible for a patient to take an individual dose in a single blister card to work or social events. With this innovative packaging, AMCOR demonstrated sensitivity to improving patient experiences and increasing sustainability.
Never Miss a Spot Technology, Extended Wand Sunscreen Applicator

*PHD Skincare, USA*

PHD Skin Care earned a Gold Award in the 28th DuPont Awards for Packaging Innovation for Never Miss a Spot Technology, an excellent example of packaging innovation at its best. This product was recognized for excellence in Technological Advancement and Enhanced User Experience in the application of sun screen to those hard to reach places. The sprayer provides a uniform fine mist to aid in full coverage of the product. The sprayer also has an easy-to-use lock that prevents inadvertent discharge during transport and storage. Consumers regularly express frustration over topical personal care product application....it’s impossible to reach your back without assistance. The pivoting action of the wand coupled with the fact that the sprayer works at any angle enables sunscreen application to the entire body...without assistance. The wand technology has leveraging ability into other products in personal care as well as home care markets such as gardening chemicals and insect sprays.

*Rust-Oleum® SpraySmart™ Marking Paint Pouch

*Printpack, USA*

Printpack won a Gold Award in the 28th Annual DuPont Awards for Packaging Innovation for its innovative new Rust-Oleum® SpraySmart™ packaging, which replaces a conventional aerosol can with a technology enhanced barrier pouch. Marking spray paint is used to identify underground utilities, athletic fields, and landscaping. It is traditionally packaged in rigid aerosol canisters that spray upside down and do not evacuate fully, creating a high volume of hazardous waste that requires a special disposal method. Recognized for Responsible Packaging and Enhanced User Experience, the SpraySmart™ enhanced barrier pouch represents a step change in the application of outdoor paint. The movement away from a traditional aerosol can not only improves the user experience by increasing efficiency and lowering weight but also demonstrates responsible packaging by replacing a potentially hazardous can with a pouch that can be disposed of in the regular waste stream. Rust-Oleum® SpraySmart™ pouches mix and evacuate more effectively, providing more paint coverage for the same package weight, and the used pouches take up much less space. Additionally, the transparent areas within the graphics on the pouch allow users to easily see how much paint remains in the pouch.

*SILVER AWARD*

*Christmas Bow Label

*Coca Cola, Belgium*

Coca Cola earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for its Christmas Bow Label for excellence in Enhanced User Experience. A real breakthrough in terms of packaging science and innovation, the Christmas Bow Label conveys a truly novel, interactive user experience. It demonstrates a very creative design execution by using a modified roll-fed label that is distributed through the normal supply chain in flat form and then easily turned into a bow when the consumer pulls a tab. It can be flattened back out and reformed numerous times, allowing multiple consumer experiences. Using a combination of high speed flexible printers and more specialized narrow web printers, this interactive label delivered a surprising and festive addition to a standard soft drink. And, it was done cost effectively and without impacting the high speed bottling operations. This project worked at the edge of, but within, the technical capability of bottling equipment by adding the complex production/conversion process to the packaging production supply chain.
**Next Generation Spice Paste Tube**
*House Foods Group Inc., Japan*

House Foods Group, Inc. earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for their innovative squeezable spice tubes for excellence in Enhanced User Experience. With this package, House Foods Group, Inc. demonstrates their great understanding of consumers, especially the aging population, a major group in Japan. The easy-to-open and easy-to-squeeze tube provides greater product dispensing than previous tubes. The creative design made the package fully squeezable with very minor changes to the shoulder part, allowing consumers to remove the product completely. The 2-D barcode printed on the tube takes users to an interactive cooking website with over 35,000 recommended recipes using this spice, an excellent demonstration of on-package marketing that appeal to the growing number of working women. Food waste reduction and volume reduction of packaging materials are growing trends in the packaging world, along with the worldwide business trend towards environmental sustainability and extending educational engagement with consumers.

**Sani-Stak™ Take-Out Container**
*Go To Containers, USA*

Go To Containers earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for the Sani-Stak™ Take-Out Container, which advances food safety and consumer convenience and reduces the need for bags. Exhibiting excellence in Enhanced User Experience, the creative, patented design is stackable, enabling consumers to carry their meals in a safer and healthier way with reduced risk of contamination and greater product quality. A nesting system locks two, three or more containers in place. One container will not slide off another container when stacked, and multiple containers can be stacked on top of another and tilted to a 60-degree or greater angle. The innovative design takes two eco-friendly materials (PET and bagasse) and makes the containers interchangeable and usable with each other. The soufflé and condiment cups nest on top of the container rather than in with the meal. Elevating fried foods from the bottom allows moisture to settle away from the meal while allowing steam to circulate. This keeps wings or other fried food crisper in comparison to a traditional take-out container. What makes the concept uniquely innovative is that it is not limited to use on a clamshell container. It can be integrated to be used on containers of various sizes, shapes or materials, creating a portfolio of products that work together for hot and cold meals.

**Tetra Rex® Bio-Based Fully Renewable Chilled Carton**
*TetraPak, Italy*

Tetra Pak earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for Tetra Rex® Bio-based, the first carton packaging made entirely from plant-based materials. Honored for Responsible Packaging, this fully renewable package for chilled liquid food is produced entirely from renewable, recyclable and fully traceable resources, including 100% bio-plastics derived from sugarcane and FSC™-certified paperboard. The advanced sustainability profile of the package includes a reduction in CO₂ of 4kg per kilo of PE. With effective on-pack communication, this package offers dairy and beverage brands a competitive advantage as consumers increasingly demand sustainably produced products. With it, Tetra Pak has shown a true commitment to sustainable packaging solutions that will inspire others to believe stretch targets on environmental performance are achievable.
**PhutureMed™: Advanced Packaging Solution for Pharmaceuticals**

*Palladio Group, Italy*

Palladio Group, together with E Ink, was granted a Silver Award in the 28th DuPont Awards for Packaging Innovation for their patient-forward packaging design for PhutureMed™—an excellent example of packaging innovation that benefits the greater good by advancing patient safety. Honored for Enhanced User Experience, this advanced packaging solution supports a number of features designed to monitor the quality of medicines shipped to patients and improve medication adherence of patients to prescribed drug therapies. The package records all accesses to the package, providing a time log when the medication was taken by the patient. The log serves as a reminder for older patients as to whether they have taken their medication or missed a dose. This vital information can be recalled, analyzed and shared with practitioners, removing any uncertainty by patient or practitioner about whether the medication was taken at the required times. The package also has a temperature monitor with an E Ink digital display that warns users if the temperature ever reached below or above a set range, assuring users that their medication is safe to be used. The E Ink display is flexible so it will not break and will continue to display the last information even without battery power.

**Transparent DuPont™ Surlyn® Tube**

*COTY Brasil*

The Transparent DuPont™ Surlyn® Tube, developed by COTY Brasil, is a significant advancement in packaging for the Latin America market that has earned a Silver Award in the 28th DuPont Awards for Packaging Innovation. Exhibiting excellence in Enhanced User Experience, COTY Brasil used DuPont™ Surlyn® to replace PET, providing a better tactile experience as well as outstanding clarity—all while capitalizing on unused capacity on existing filling equipment. COTY Brasil innovated around existing materials and filling technologies to create several geographic firsts in the use of DuPont™ Surlyn® as a replacement for PET. The use of DuPont™ Surlyn® allowed for outstanding compatibility to oils in a plastic tube with high clarity. The cosmetic industry has been developing products with colors and micro particles to meet the market demand for packaging with high transparency, which allows consumers to view aesthetic appeal of the cosmetic product. DuPont™ Surlyn® more than meets this need by creating transparent packaging solutions.

**Klearfold® Keeper Package - Enigma USB Hardware Encryption & Decryption Device**

*HLP Klearfold, USA*

HLP Klearfold earned a Silver Award in the 28th Annual DuPont Awards for Packaging Innovation for the Klearfold® Keeper Package – Enigma USB Hardware Encryption & Decryption Device. It was important to BlackSquare Technologies, the marketer of the Enigma, that the package help demonstrate their product’s simplicity and ease of use, while providing tamper evidence. Honored for Enhanced User Experience, HLP Klearfold’s Keeper package is a unique visual packaging system that combines a printed plastic sleeve and a locking vacuum-formed tray to create a secure and distinctive shelf presence. The package keeps the Enigma device secure yet allows consumers to remove it easily, without the need for scissors or other opening implements. In-folded tabs on the Keeper’s sleeve engage a specially designed flange on the vac-form, lock the two components securely together, without the need for wafer seals or the use of sonic, RF, or heat-sealing equipment. A thumb-notch perforation in a corner of the clear plastic sleeve provides a unique, easy-opening feature and provides tamper evidence. The Enigma Klearfold Keeper sleeve is printed seven-color UV offset plus varnish, and one-color, white, silkscreen printing. With its distinctive shape, packaging simplicity and high-quality printed graphics, the Klearfold Keeper visual package clearly achieved the product manufacturer’s desired product positioning.
Sealed Air earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for Korrvu Lok™, a sustainable, customer-focused design for packaging for e-commerce. It was honored for Enhanced User Experience. While Sealed Air’s Korrvu suspension and retention packaging was already available in the market, the Korrvu Lok™, which integrates directly with a corrugated shipper using pressure sensitive adhesive, provides a valuable improvement. The pop and lock design reduces operator error and increases the speed of order fulfillment – critical in the fast-moving e-commerce world where every second counts. The elegant visual design also enhances the brand of the items inside and enhances the consumer experience. Manufactured with fewer materials than past designs and compliant with national and international recycling requirements, the packaging is manufactured using a standard corrugated fiberboard frame that is easily recyclable in the corrugated waste stream. This solution eliminates the need for messy or excessive void filling materials, keeping the item inside locked in place and cleanly presented. The design is easy to open, easy to reuse and recycle, and enables effortless reverse logistics if the customer needs to make a return.

TricorBraun earned a Silver Award in the 28th DuPont Awards for Packaging Innovation for their very novel packaging for Prestone® Stop Leak, which took a complicated system and made it user-friendly. Demonstrating excellence in Enhanced User Experience, the innovatively designed packaging format contains three separate component parts combined as one, and provides a simple and efficient use for car repairs. The clear full-body shrink sleeve label finishes off a sophisticated automotive package that is eye-catching on the store shelf. The liquid portion is contained by a 3oz PP bottle which sits in an 18oz clear PET bottle. The overcap does double duty as a jar holding the pellets portion of the product and is closed with a 51mm pinch and turn CRC closure. The standout feature is the design aspect that keeps the liquid formula and pellets separate until use. The product packaging drives both consumer interest and serves as a communication tool to show the ease and effectiveness of the product. This 3-in-1 product allows Do-It-Yourselfers to affordably fix their car without a trip to the mechanic, providing real value and enhancing the consumer experience.