

Inventive and stylish - a thoroughly modern material

Contemporary, progressive and sustainable must form at least part of the business mantra of all users of packaging materials; and alufoil is one of the brightest stars in all these areas.

Over the last year EAFA has pro-actively sought innovative solutions to environmental concerns, and new product and market developments.

Consumer concern about sustainability issues and all these imply for a planet running out of resources has often resulted in an unfair onus on the packaging sector to clean up its act.

In an attempt to set the record straight and address the real issues EAFA through its division Flexible Packaging Europe commissioned an independent LCA (Life Cycle Assessment) to clarify the performance of packaging from 'field to plate'.

The results, on pages 2-3, prove that packaging not only saves resources but also contributes negligibly to global warming. Nonetheless the alufoil industry's work on reducing foil weights, recycling projects and reductions in energy consumption continue.


This year's Alufoil Trophy shows how flexible packaging and container manufacturers and users are working in partnership to provide consumer convenient innovation hand in hand with environmental commitment.

Creating solutions for consumer convenience led EAFA to examine how alufoil could expand its role in ready meals for the microwave. It asked the Fraunhofer Institute for Process Engineering and Packaging IVW to independently assess its performance in the microwave.

The results provided clear evidence that not only is it safe to use in the microwave, alufoil can produce better cooking results. This has led to a number of new applications for microwaveable and dual-ovenable food products on Europe's supermarket shelves.



interpack 2008
 Find out more about all these developments at interpack and view the Alufoil Trophy 2008 winners.
EAFA is exhibiting in Hall 11 Booth A37



Ralf Zacherl, one of Germany's most famous celebrity chefs, will be cooking up a storm on the EAFA stand showing visitors just how irreplaceable alufoil is in the kitchen.

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Optimistic outlook for 2008

Resource efficiency driven by customer expectations means optimism remains high for European foil rollers.

European Aluminium Foil Association (EAFA) figures for 2007 show that 864,000 tonnes of alufoil were produced by its membership; just 0.2 per cent down on a record year in 2006.

Thinner gauges, mainly used in flexible packaging, showed a slight drop in tonnage of 1.3% but this hides growth

of about 5 per cent in the surface area produced. Deliveries of thicker gauges, used mainly for the manufacture of semi-rigid trays and technical applications, rose significantly by 5.5 %.

European production grew by 1% despite growing imports from Asia; exports fell by 6% due to the difficulties of exporting into US\$ regions.

For more statistical information visit: www.alufoil.org

Eco-balance is good news for flexible packaging

The pressure on the packaging sector to examine its environmental footprint has never been higher. There has always been a belief in the packaging sector that the environmental impact of packaging has been greatly exaggerated and this seems to have been proven by a new Life Cycle Assessment (LCA) of food products commissioned by Flexible Packaging Europe, a division of the European Aluminium Foil Association.

The LCA, also known as eco-balance, creates a picture of flexible packaging for food from field to plate. The Study "LCA of Packed Food Products: the function of flexible packaging", conducted by ESU-services,

takes into account processing, packaging, and transportation to final production and packaging; transport to retailers and households; and consumption in the home.

It shows that the environmental impact of the packaging used in the investigated sample products is minor in comparison with the impact of food production, processing and consumer behaviour.

In fact packaging contributes to minimising environmental impact by reducing spoilage and over consumption. To reach these findings a series of case studies were undertaken including flexible packaging for coffee and butter.



Coffee packs get thumbs up

Using an integrated approach the study looked at the eco-balance for a standard cup of coffee by taking a journey from the coffee plantations near the Equator to the cup of coffee the consumer drinks.

Investigations were based on a foil laminated 500 gram bag; and 2g stick pack. The impact assessment included ground or instant coffee with water and milk, plus spoilage, packaging disposal and consumer behaviour.



The results show that the retail packaging element takes up just a small fraction of the whole environmental impact. The highest impacts in producing a cup of coffee are: the brewing of coffee, its cultivation and production, and the milk production for white coffee.

Packaging has a low environmental impact, and although single-serve packs normally need more packaging per filling this is often outweighed by the role tailor-made packaging has in reducing spoilage.

The Study states: "Packaging is not considered to be of primary importance for this type of product."

According to indicators packaging minimisation measures to consider include removing the carton from instant coffee packaging and optimising the amount of packaging by choosing adequate pack sizes.

Environmental innovation

Fairly or not the onus is continually on brand owners and packaging companies to create more environmentally acceptable pack solutions.

Here are just two of the developments led by the alufoil packaging sector.

Refillable perfume

Givenchy has come up with a clever idea so that consumers can refill 50ml glass bottles of Eau de Parfum.



Produced by Alcan Packaging Pharma Europe to a design from Cofatech, Lingobig® is the first printed pyramid-shaped reclosable sachet containing perfume on the market.

Lingobig® is made from a laminate of PET 12µ / alufoil 12µ / MDPE 100µ; reverse rotogravure printed in 1 colour.

The use of the refill will save and

replace the purchase of a glass bottle, giving a real packaging weight reduction.

The positive environmental impact on the life cycle of the product includes savings on transportation, due to the small volume of laminate reels compared with the volume of bottles.

Cool for cats

In an important market shift away from the standard use of solvent-based lacquers Constantia Teich has developed a water-based lacquer currently being used for Saturn Petfoods' Athena cat food.

The company believes that the development makes a valuable contribution to environmental concerns and the reduction of CO₂ emissions. The new system meets all the criteria associated with solvent-based lacquers including heat resistance, sterilisation and the ability to be deep drawn.



Butter facts

Milk production to butter storage in the consumer's fridge were considered and eco-balance comparisons made using a 250 gram family pack and a single portion 15 gram pack of unsalted butter wrapped in a laminate with an aluminium foil barrier layer.

Process steps considered ranged from the separation of raw milk into low-fat milk and cream to the pasteurisation of cream, cooling, ripening, and churning.



The result of the lifecycle assessment is dominated by the provision of milk; methane production by cows; and fertilisation during livestock husbandry which is responsible for the highest burden. However the impact at the retail level is not insignificant given the energy intensive storage needed and the impact of refrigerant emissions.

Once again the impact of packaging is low. Interestingly the disposal method chosen for packaging has practically no influence, while the impact of transport used to go grocery shopping is limited.

The fact that the overall impact of flexible packaging on the environment for the foods studied is negligible will be of little surprise to packaging professionals. However the trick will be to help consumers understand the role they play in creating a sustainable environment.

The Study was conducted by ESU-services Limited, fair consulting in sustainability, of Switzerland, on behalf of Flexible Packaging Europe, a division of European Aluminium Foil Association. (results are based on eight environmental indicators using the well-established CML - Centre for Environmental Studies - method) www.alufoil-sustainability.org

What does the consumer think

Consumer surveys often show markedly different levels of support for eco-friendly products, however, the consensus of opinion is that companies ignore sustainability issues at their peril.

A recent study in the US found that consumers would spend US\$13 more per \$1,000 for environmentally responsible products and an Edelman study of 5,000 consumers in nine countries, including Brazil and China, found 70% were willing to pay more for a brand that supports a good cause and 73% were willing to pay more for environmentally-friendly products.

Meanwhile, according to Wal-Mart, 62% of US consumers would buy eco-friendly products if there was no price difference.

Wal-Mart data shows that 57% of US consumers will buy eco-friendly products if they know how they affect the environment, but 78% say they need more information on how to solve environmental issues.



Consumers demonstrate outside Tesco UK about what they believe is excess packaging

Global Retail Innovation: Ten to Watch from the UK-based Institute of Grocery Distribution marked out sustainability as a top issue. "A company's stance on sustainability is fast becoming a key factor in consumer buying decisions," says Jonathan

Gunz, the report's author. "Sustainability has to be backed up by substance and robust measures. It is not just a branding exercise, although getting brand communication spot-on to reflect consumers'



concern is essential. Consumers are increasingly aware. They will see through half-measures that aren't backed up by genuine action."

New research from Datamonitor for BT in the UK shows a significant difference between the efforts being made by businesses to act sustainably, and the perceptions of consumers.

About 84% of companies believe it is important to operate in a sustainable manner, while only 3% of customers think businesses are honest about their actions.

Contrary to general cynicism, businesses claim that they recognise and are tackling sustainability issues. The report found that 52% are taking steps to improve their impact on the environment and communities, and 32% say they are doing all they can.

The benefits of having a sustainable business are underpinned by the finding that in the last year 27% of consumers have turned down a product or service from a supplier on the basis that the provider had a poor reputation for being socially or environmentally responsible.

Alufoil Trophy 2008

Progressive convenience



Head Judge
Arne Russ
Purchasing
Director
of confectionery
specialists
August Storck

Showing off alufoil's role as a convenient, environmentally conscious, innovative, progressive and reliable material was not difficult for the 26 entries to the Alufoil Trophy 2008. However, it was a major endeavour for the judges to reduce the list to just seven winners.

“The sheer diversity of applications that are possible with alufoil is incredible and I was pleased to see that consumer convenience and customer partnerships were high on the agenda for all entrants. Of particular interest was the number of packs using combinations of different material.”



“Winning reinforces our conviction that Beauty Purse brings real innovation and added value to the market for cosmetics impregnated wipes, masks and pads.”

Laurence Kerleroux

Product Manager Cosmetics - Flexible Packaging, Alcan

Beauty in a purse

Alcan Packaging Pharma Europe's stand-up reclosable Beauty Purse® is being used by Quies for its Quies Flash Frais soothing eye masks.

Arne Russ said, “This clever pack meets consumer calls for further convenience in the cosmetics and toiletries market. The attention paid to the open and close mechanism makes this a notable user-friendly concept.”

Claimed to be the first portable stand-up pack for health and personal care, the Beauty Purse® combines aesthetic appeal, and simplicity of use. It is equally suitable for the handbag, travel or the bathroom.

The patented open and reclose system ensures precise closure even after many uses.

The front and rear of the gusseted pack are manufactured from BOPP 30µ/alufoil 12µ/LDPE 75µ; and the gussets from PET 12µ/alufoil 12µ/LDPE 75µ. The pack is reverse printing in 4-colour rotogravure and is enhanced by alufoil's natural aesthetic value. The large printing surface improves brand visibility and its communication potential.

Foil in a wallet

Novartis Consumer Health won an Alufoil Trophy for its user-friendly Nicotinell L-Pack.

“This wallet-style pack is an example of the successful combination of materials. The L Pack also represents a successful partnership between product and pack development, to produce a convenient anti-smoking aid,” said Arne Russ.

The packaging design challenge for this Nicotine Replacement Gum pack was to keep both the size of the gum and the number of gums per blister unchanged within the wallet-style pack. The solution was to fold the blister onto the foil side to provide protection from accidental perforation.

The L-Pack is made of PVC/PVdC and aluminium: Flexo print on the outer side/pre-lacquer/alufoil 20µ/heat-seal lacquer/transparent PVC/PVdC (250µ/23µ).

The blister is attached to the carton so that it self unfolds when the L-Pack is opened and returns to the folded position when closed.



“Winning an award is important to us because it shows that Novartis Consumer Health has best in class packaging solutions and it also demonstrates that we can be very creative even when using standard materials (blister with aluminium foil and carton).”

Lionel Jeannin

Global Packaging Project Manager - OTC, Novartis

Chocolate on tap!

Constantia Teich's portion pack for Chocomel Hot from Friesland Foods Western Europe creates a convenient dispensing cup-shaped pack for a hot chocolate drink for use in the popular Senseo® pad machines.

"Staking a claim to part of the growing market for single serve coffee pads, this combination pack for a hot chocolate drink merges plastic and alufoil technologies to create a user convenient solution for a coffee alternative for use in Senseo® pad machines," said Arne Russ.

The packs consist of a cup with a top and a bottom foil-based die cut lidding material. The top lid guarantees the correct flow of hot water into the cup via exactly sized and positioned holes.

An integrated weakening in the bottom lid ensures a controlled push-through in the brewing machine for the flow-off of the drink.

Friesland Foods' system employs a simple adapter to hold the "cup" instead of the standard coffee pads used by Senseo® coffee machines. The adapter fits all four generations of Senseo machines.

Providing aroma-barrier, long shelf life and heat resistance for sealing, the duplex structure was critical to the packs development.

To ensure all these criteria were met: the top lid is manufactured from Print (UV Flexo)/Print primer/Alufoil 0.05mm/separation and protective lacquer/lock-film; and the Bottom Lid: 0.06mm alufoil/lock-film.

"The Alufoil Trophy is the most important award for foil-based packaging and winning an award underlines our innovative strength, creativity and ability to find new solutions. Winning an award with a customer proves that co-operative developments results in successful new ideas."

Dr. Martin Kornfeld
Head of Research & Development, Constantia Teich

Super ultrasonic solution

Alupak and Alcan Packaging (Singen and Rorschach) joint development of the PeeliCan® is being used to great effect for all kinds of fish fillets and seafood.

"This is a great pack which drives alufoil packaging into a new market and replaces the ring pull lids traditionally used for fish packs. The difficulty of positioning fish into trays with 100% accuracy and the consequent problems with sealing the lids has been brilliantly overcome by the ultrasonic sealing process," stated Arne Russ.

Offering great advantages to fillers, retailers and consumers because of its lightweight, stackability and easy opening, the PeeliCan® provides a simplified filling process using a patented ultrasonic sealing technology. This ensures safe sealing even when the rim of the packaging is contaminated by product during filling.

The multi-coloured rotogravure printed container is made from stove lacquered/ alufoil 130µ/PP and the multi-colour lidding foil from a laminate of PET/alufoil 50µ/ peelable PP layer.

Two further systems are now available for anchovies and herrings. Customised packs offering shelf differentiation are also possible.

This new filling/sealing technology and packaging system were developed jointly by Alupak (final pack concept), Alcan Packaging (packaging material) and Waldner (filling/sealing machine).



"The Trophy is important to the aluminium foil industry as it underlines that new developments secure competitiveness for aluminium packaging while also achieving ecological benefits compared with conventional ring-pulls."

Andy Swaker
CEO, Alupak

More winners on page 6

Alufoil Trophy 2008

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"Receiving an Alufoil Trophy is great recognition for Alcan Packaging, it highlights our commitment to the success of our customers by working in close partnership with them to provide new and innovative packaging solutions that meet or exceed their expectations."

Michael Cronin, President
Alcan Packaging Food Europe

Purring with delight

Alcan Packaging Zutphen had the judges purring with delight with its eye-catching organic-shaped alufoil tray with easy-open lid for Sheba Essence from Mars Petcare Europe.

Designed in close co-operation with Mars, the 130 μ PP laminated aluminium tray features all over printing in 7-colour rotogravure. The 360 $^{\circ}$ printing is flashy and clear, providing excellent on-shelf differentiation and positions the brand clearly as a premium product.

"The shape and the technical achievement in creating the 360 $^{\circ}$ print for this high-valued added cat food mean this pack really stands out from the crowd. The Sheba Essence pack is very different from traditional packs for wet cat food and creates real opportunities for branding and on-pack promotion," explained Arne Russ.

The manufacture of the tray created a number of challenges; the first was to anticipate the degree of deformation caused by stamping prior to pre-printing.

The non-standard asymmetrical shape meant that extra attention had to be paid to the stamping process which causes stress, break the tray or produce wrinkles. Finally to ensure a "smooth surface", creating the correct dent resistance for a smooth wall tray was an added difficulty.

Wiping it clean

Protective Packaging's laminated foil pouch with two compartments for AGMA Healthcare's Sterile Zyceine Wipes containing a sporicidal disinfectant is designed for use in sterile environments in the healthcare sector.

"Hygiene is of critical importance in hospitals where 'super bugs' are a cause for concern. The pack helps meet regulations," said Arne Russ.

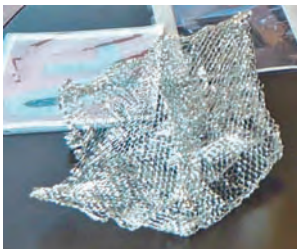
The AGMA multipart chemical system allows a potent sporicide (essential to destroy pathogens) to be generated in small, useful quantities at point of use. The two compartments are essential to keep the incompatible products apart before they combine at point of use.

The compartments maintain the individual integrity of the two essential reagents during packing, gamma-ray sterilisation, delivery and storage. At point of use, the vulnerable seal is ruptured and the reagents and wipes mixed together. The pack comprises PET 12 μ /alufoil 8 μ /PE 60 μ .



"Dedicated to our industry we pride ourselves on discovering Barrier Foil packaging solutions, however challenging or complex."

Simon Jolly, Sales director
Protective Packaging



"The Alufoil Trophy demonstrates that aluminium foil is multi-talented across a host of applications, contributes to safety and is an essential 100% recyclable all-round material."

Wolfgang Winkels
Head of Technical Customer Service Foil
Hydro Aluminium

Explosive development

Hydro Aluminium's winning entry for ProTechT Solutions' Certinite™, a passive explosion and fire protection system, proves how successful aluminium foil is across any number of market uses.

Arne Russ said: "This entry shows the amazing versatility of alufoil; it was fascinating to learn that heat can be drawn away from combustible material by honey-combed alufoil."

Certinite™ prevents explosions and reduces the risk of fire by up to 80% compared with a fuel tank without Certinite™. It is manufactured using plain alufoil with characteristics that allow it to be stretched and formed on dedicated machines to produce a "net like" structure.

The resulting 50-80 μ material is then shaped into rolls, cylinders, cubes and bricks by special roll machines or presses to create tailor-made solutions for different applications. The mesh is designed to secure optimal flame resistance and minimal volume displacement when placed in gas or fuel tanks and "confined spaces" to prevent explosion and fire.

A day in the life of a consumer

Its incredible versatility means that all a consumer's needs can easily be satisfied by products wrapped in alufoil. Here we take you through a day long journey with alufoil...



07.00: Wakey wakey rise and shine!

Falling out of bed into the bathroom consumers will find shampoos, conditioners, toothpastes, face wipes and even contact lenses all in handy alufoil based sachets and tubes.



Brush the teeth with fresh toothpaste – in alufoil laminate tubes from Huhtamaki.



Contact lens wearers rely on the moisture retention, stability and easy peel qualities associated with Steril-Up® retort lidding materials from Alcan Packaging.



The alufoil element of the laminate used for the Clean & Clear tube provides excellent barrier properties and aids high frequency sealing of the side seam.

07.30: A cup of coffee and off to work...

A good day starts with a cup of coffee, whether made with coffee beans packed in a flow wrap with valve, a coffee pad for a Senseo® coffee machine or even a stick pack of instant coffee. What ever the choice all the packs have an aluminium element.

The eye-catching Dallmayr Kaffeeartitäten pouch for coffee beans uses a flow wrap with valve from Huhtamaki Ronsberg. The valve ensures that the gases can escape. The easy open and easy peel pouch is manufactured from a 7-colour rotogravure printed PET/alufoil/PE laminate for high aroma protection. The aluminium foil guarantees a shelf life up to 18 months.

And what about some milk with your cereal or cup of coffee -alufoil plays a major role in liquid carton manufacture as in these 300ml aseptic cartons from SIG Combibloc's combifitSmall 300ml aseptic packs fitted with a combiSmart recloseable screw cap.



12.30: It's lunch time!



Try a Healthy lunch time soup from the Knorr Colour Wet Soups range of five healthy varieties. The retortable stand-up pouch from Huhtamaki Ronsberg is made from a PET/ALU/OPA/PP laminate, printed in 8-colour rotogravure with matt varnish.

A fresh yoghurt or fruit juice drink from the Danone Pitny or MrOzer range will also go down well at lunchtime. Produced by Alcan Packaging Teningen the pack features an alufoil lid with pull tab to reveal the drink hole.



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A day in the life of a consumer

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15.00: Time for a coffee break

Mr Coffee has introduced a high-quality, gourmet single-serve coffee system for offices.

Novelis Foil Products collaborated with Mister Coffee to design a smooth-walled container for the Bodecker Brewed system that met the demanding technical requirements of the project. The aluminium container, housing an internal filter and coffee, is sealed with an aluminium lid.



Want some cream? Try a single server coffee creamer like these supplied by Nyco Flexible Packaging.



Spoil yourself and enjoy a piece of Ragusa Camille Bloch chocolate with your coffee. The gas tight flowpack from Amcor Flexibles Schüpbach is made from a laminate of Print/alufoil 9µ/PETB film, with laser perforations for easy opening.

17.30: Time for a drink and a snack?

Work is over for the day - what about an easy-to-eat on the go Peperami? This thermoformed package for smoked sausages offers high barrier & excellent product protection. Produced by Huhtamaki Ronsberg, the 6-colour rotogravure printed PET/alufoil/PE laminate, has soft haptic properties and is easy to open due to the varnished surface which improves the grip.



You could also try a lemon vodka in a tube again from Huhtamaki Ronsberg.



19.00: Home and time for dinner

After a hard day it's time to enjoy a meal with a friend. Put a delicious ready meal packed in an alufoil tray in the microwave.



Ready to eat? Why not try a glass of Bordeaux from this stylish pouch with finger holds from Amcor Flexible Raackmann.



While its heating have a beer in a bottle sporting an attractive bottleneck foil like these from Haendler & Natermann for these Beitrag FHF Premium beers.

Bottle neck foils provide shelf appeal, signify quality and also provide tamper evidence.

A key feature of these new neck foils is that they can be applied without water. Until now they have had to be applied using water to prevent damage, while the self-adhesive labels have to be applied in dry conditions.

To overcome this H&N has developed a process that employs a special coating applied during printing so that the foils can be applied without water.

The coating reduces surface friction and prevents the brush ends causing damage to the neck foils as they are applied and means that they retain their perfect look while at the same time reducing water consumption at the brewery.





Find out more about alufoil !

– visit www.alufoil.org where you can find out all about every EAFA member, make business enquiries and see the latest news about alufoil applications and the industry.

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