European Aluminium Foil Association e.V.

Press Release

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Originality and technical innovation take centre stage

Alufoil Trophy winners demonstrate fresh thinking with existing and new products

Entries for the Alufoil Trophy 2012 showed great originality in developing advanced forms of familiar products as well as some ground breaking new ideas, according to this year's judges. The competition, organised by the European Aluminium Foil Association (EAFA), attracted 52 entries across five categories and ranged from household goods to packaging, on through to automotive applications and a remarkable survival product.

"The great diversity of applications and multiple functionality of alufoil were clearly demonstrated by the entries for this year's Trophy." observed Antoinette Devine, global packaging consultant for SABMiller, who headed the judging panel. "But we were particularly impressed by the original thinking which had gone in to some traditional items which took them to a new level of performance and technical innovation," she explained.

Ultimately the judges awarded 13 entries with an Alufoil Trophy. The competition is open to products which are either made from alufoil or contain alufoil as part of a laminate or structure. Categories cover almost every market for packaging, as well as many other technical uses, encompassing Consumer Convenience; Marketing + Design; Product Preservation; Resource Efficiency; and Technical Innovation. One product was awarded with an Alufoil Trophy for its Overall Excellence, having scored highly in various categories.

There were strong entries which had greatly improved the appeal, openability, stability or security of the products through design or the innovative use of alufoil.

THE WINNERS

Consumer Convenience

- Constantia Flexibles: Stick pack opening solutions
- ELAG Verpackungen / AMPAC: Poli Paté
- Plus Pack, Danapak and Tibon Technology: TIBON®

Marketing + Design

- Cofresco Frischhalteprodukte: Toppits®/Albal® Gourmet aluminium foil
- Leeb: ENEXY

European Aluminium Foil Association e.V.
Am Bonneshof 5
D - 40474 Düsseldorf
Tel: +49 (0)211 47 96 168
Fax: +49 (0)211 47 96 416
enquiries@alufoil.org
www.alufoil.org

Product Preservation

- Amcor Flexibles: Formpack®Dessiflex™ Plus
- Guala Closures: Roll On TE™

Resource Efficiency

- Constantia Flexibles: Blister lidding foil with water based primer
- Huhtamaki Ronsberg: R-Laminate

Technical Innovation

- Constantia Flexibles: Staxyn Child-Resistant Blister Pack
- Novelis Lüdenscheid, Packaging & Converting and Lydall Gerhadi: Vibration damped heat shield
- Protective Packaging and Survivakit: Survivastill

Overall Excellence

- Amcor Flexibles: Canny

Summary text of all winners follows on pages 3 – 6

The Alufoil Trophy is organised by the European Aluminium Foil Association. There are five categories – **Consumer Convenience**, **Marketing + Design**, **Product Preservation**, **Resource Efficiency** and **Technical Innovation**. Judges also awarded **Overall Excellence**. For 2012 there were 13 winners from 52 entries.

High resolution pictures can be downloaded and all winning entries can be viewed at www.alufoil.org

Further information:

Guido Aufdemkamp, Director Communication

The European Aluminium Foil Association is the international body representing companies engaged in the rolling and rewinding of alufoil and in the manufacture of alufoil containers and of all kind of flexible packaging. Its more than 100 members include companies in Western, Central and Eastern Europe.

Summary (more details available at www.alufoil.org)

CONSUMER CONVENIENCE

Applying new ideas to existing pack formats in creative ways can often lead to improved consumer convenience as the three winners clearly demonstrate.

Constantia Flexibles' innovative **opening solutions for stick packs** offer easy and clean opening for dosage stick packs, primarily used in the pharmaceutical sector for oral applications of both liquids and powder. The Laser Perforation Opening Aid can be opened quickly and simply and is clearly marked by arrows at one end of the stick. Using the PET/Alu/PE-LD easy-tear laminate and laser perforation allows 100 per cent of the aperture to be opened. The stick pack with Opening Aid TOF introduces a micro-perforation in a defined area of the PET layer of the laminate. Again, the device is also suited to oral applications for pharmaceuticals, as well as other personal care or food products. Both forms of opening come in child resistant formats and have no impact on the barrier properties of the aluminium foil laminate.

A three-sided sealed pouch containing a chicken sausage pâté from **AMPAC's Swiss division, ELAG Verpackungen**, offers a packaging format not normally used for meat paste product. **Poli Paté**'s shape and high quality print finish enhance visual appeal but the key factor is its convenience and ease of product delivery. The pouch, made from a 3 layer aluminium laminate, incorporates a re-closable spout and is hot filled at 85°C, greatly increasing the product's shelf life. The concept opens up new possibilities for 'on the go' convenient snack style products.

Plus Pack, **Danapak Flexibles** and **Tibon Technology**'s have developed a multi-layer technology applied to aluminium trays and lids. Trays using **TIBON®** technology reach temperatures well above 100°C very rapidly because it allows the pack to absorb and retain heat from a conventional oven or grill resulting in reduced cooking times of between 25 and 40 per cent compared to conventional alufoil trays. The TIBON® coating enables infrared radiation to be transmitted in a highly efficient way into the food. The heat transmission per cm² of the tray increases by up to 400 per cent, allowing frozen food to jump over the 'water-phase' and go directly from frozen to baked. At a time when energy costs concern everyone this can lead to reduced energy consumption and lower CO2 emissions.

MARKETING + DESIGN

Technical know-how and clever design have been combined to create these two novel developments.

A gourmet aluminium foil produced by **Cofresco Frischhalteprodukte** is a creative and well thought out improvement to a very traditional product. Aimed at 'sophisticated hobby chefs' wanting to create 'juicy and aromatic enjoyment',

Toppits®/Albal® gourmet foil has patented embossing to give it a 3-dimensional structure which provides special properties. During the embossing process the 3-D dome-structure is formed, giving a peak-to-peak thickness of up to 400 micron. This reduces the contact surface providing better ventilation for the food and creates retention pools for juices allowing for a higher amount of liquid. The embossing also enhances the stiffness of the foil, making it possible to shape it into almost any desired form.

Leeb's alufoil wrap is aiding the **ENEXY** power snack to tap into the strong demand for 'on the go' energy products. The stunning pack shape and enhanced graphics are accomplished through clever design and use of an Alu/PE solvent free laminate. Leeb provided the laminate and printing, working closely with power snack manufacturer Enexy and Chocal Aluminiumverpackungen which formed, converted and helped with the ultimate design. This is a very difficult shape to wrap. The solution offers excellent readability and a complete adherence to the complex contours of the product. Important to the design is the tab opening which runs along the front of the bar rather than around it. This allows easy access and enables consumers see the entire clever shape of the bar when unwrapped, adding to its appeal.

Product Preservation

The importance of safeguarding not only products but brands was acknowledged through the two winning entries, both of which demonstrated well thought out solutions and technical expertise.

An improved alu/alu blister, **Formpack® Dessiflex™ Plus**, developed by **Amcor Flexibles**, is the latest version in this product range and offers new standards of moisture control for sensitive pharmaceutical tablets where shelf life and stability of the product are critical factors. By including the desiccant in the sealing layer of the cold-formed blister bottom foil the drying speed for tablets, such as lyophilized or probiotic tablets, which retain some moisture after processing, is reduced to a few hours or days. The higher the temperature, the faster the reaction. The new Formpack® Dessiflex™ with higher capacity can keep individual cavities dry, even in tropical conditions, for up to five years, according to Amcor Flexibles.

Guala Closures Group has developed a standard sized roll on aluminium screw cap which incorporates a tamper evident feature. **Roll On TE™** has been produced to offer the wines and spirits sector additional protection for premium brands from forgery or tampering without affecting existing production lines or filling speeds. It comprises a coloured plastic ring, incorporated into a standard roll on cap (30x60mm). When the cap is opened by the consumer the ring becomes visible and cannot be removed without visibly damaging the closure. The Roll On TE™ is patented, making it more difficult for counterfeiters to copy the technology.

RESOURCE EFFICIENCY

Aluminium foil continues to play a leading role in sustainable packaging solutions and the two winners show clearly how the industry is responding.

Constantia Flexibles has developed a **blister lidding foil with water based primer** on the decorative outer layer, rather than one containing solvents, which results in major environmental advantages. This development provides pharmaceutical companies with a sustainable alternative to standard blister lidding foil which avoids chemical based solvents and, at the same time, helps to reduce the carbon footprint. The primer also resists the high sealing temperatures generated during the packaging process. By replacing solvent based systems with the new water-based print primer Constantia saved more than 220 tonnes of CO_2 emissions in 2011 and estimates that figure will increase to more than 640 tonnes per annum in 2012 and beyond.

A new laminate for the production of tubes across a wide range of products from **Huhtamaki Ronsberg** responds to the need to conserve valuable resources, yet still give the customer both ecological and economic advantages without loss of quality. Compared with a standard laminate Huhtamaki's **R-laminate** reduces the thickness and weight of the material between 25 and 45 per cent. Modern laminates have a thickness between 250 and 300 micron but R-laminate allows a reduction to between 160 and 185 micron for a toothpaste application and from 500 (extruded) or 400 (laminate) to 225 micron for tubes containing cosmetic products. In production terms the thinner laminate means significantly more tubes can be produced from a single roll, saving both material and transport costs.

TECHNICAL INNOVATION

Most genuine innovations are simple but technically very well researched and executed and in a hard fought contest in this category the judges awarded three Alufoil Trophies.

A blister pack based on aluminium **coldformed bottom material with a paperfree peelable child-resistant lidding foil** manufactured by **Constantia Flexibles** offers real benefits for sustainable production. Designed by Bayer Pharma for Staxyn, the pack was developed initially for the United States market and meets child-resistant and senior-friendly guidelines. Due to the paper-free make up of the blister lidding foil the sealing temperature on the blister line is lower than for conventional alu/paper laminates. In turn this means energy consumption is reduced and, as dwell times in the sealing section can be reduced, the blister machine can operate at higher speeds. A further advantage is improved process stability as the bubbles, which could sometimes occur in the paper during sealing, have been completely eliminated.

A novel solution to reduce vibration on powertrain mounted heat shields used on a German luxury vehicle from **Novelis Lüdenscheid**, Packaging & Converting and its development partner **Lydall Gerhadi** used aluminium foil to great effect, showing a high technical understanding of the material and its capabilities. Conventional blank aluminium heat shields can be 'excited' near or at their resonance frequency which can lead to highly amplified vibration resulting in parasitic noise and the risk of high cycle fatigue failure. The new 'sandwich' foil material, comprised of 0.2mm alufoil/0.08mm polymer/0.3mm aluminium strip, effectively damps the vibration and reduces the risk of fatigue cracks. Noise emission is completely eliminated so the overall environment in the vehicle is greatly improved.

A remarkable survival product, which makes drinking water from almost anything containing moisture, has been developed by Survivakit, with **Protective Packaging** providing the required manufacturing techniques. The **Survivastill** solar still, which relies on alufoil to trap heat, can produce up to 2 litres of drinking water per day from salt water, contaminated water, urine, wet soil or even vegetation such as moss, grass or leaves. It operates by trapping heat from the sun within an inflated chamber where the alufoil sheeting reflects the sun's rays back into the chamber to increase the internal temperature of the distilling reservoir. The alufoil offers four essential properties to the success of the still: heat reflectivity (radiant heat from the sun) to create the right environment for water evaporation; resistance to permeation or leakage; reflectivity for signalling location; radar reflectivity to assist location finders.

OVERALL EXCELLENCE

A pack showing distinctive, unusual and inventive features created the opportunity for judges to award Overall Excellence for a development that excelled across four of the five categories.

Canny, a premium quality aluminium bowl for food products, designed and manufactured by **Amcor Flexibles**, is the result of two years of development to produce a wrinkle-free aluminium thin wall bowl. Primarily aimed at premium or indulgence food markets it is designed to meet the needs of customer convenience for products which appeal to all ages. Canny has many attractive, as well as practical features, which make it stand out as an innovative alufoil product. It looks good, feels good to touch, is fully printed, as well as easy to open. In addition it is 30 per cent lighter than traditional ring-pull cans. Empty bowls are nestable, which can save up to 90 per cent on space during transportation and storage. In addition it can easily be compacted by hand to reduce the volume for disposal and is fully recyclable.