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# Winners shine a light on originality and invention in alufoil products

— New technologies or techniques bring out the best in aluminium foil, offering high impact shelf presence, environmental advantages and improved consumer convenience

**The Alufoil Trophy 2018** lived up to its reputation as one of the most highly valued awards competitions in the materials sector. This year's winning entries display excellence in aluminium foil across a wide range of applications including pharmaceutical, food and snack packaging and one which literally does make it much easier to shine LED lighting.

A panel of leading industry experts from all areas of the aluminium foil industry announced ten winners across the five competition categories. "We were impressed by the great originality of many entries, which took existing products further or added a new dimension to the use of foil. There was a highly inventive theme which showed a strong grasp of the technical possibilities of aluminium foil, while, at the same time, giving consideration for convenience and environmental impact," explained the judges.

Each year the competition is organised by the European Aluminium Foil Association, EAFA and entries come from all parts of the aluminium foil sector including aluminium foil rollers and converters. Guido Aufdemkamp, the association's executive director praised the standard of entries again this year.



"Many of the winners for 2018 are truly groundbreaking, such as helping to simplify a complex electrical process, improve access to a key medical product, or creating stunning closure designs using crossover technology. We are constantly impressed by the way the aluminium foil sector can innovate and the Trophy is an important and effective way to recognise these achievements." ///

See all the winners on the following pages.

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## Exports drive aluminium foil deliveries to record levels

**Strong demand from overseas** aluminium foil markets in the final quarter of 2017 saw deliveries from European foil rollers reach a new record tonnage for the full year. Overall deliveries for the twelve-month period to December were at 886,300 tonnes (2016: 874,900t), even higher than pre-crisis levels for the second year running.

Thinner gauges, used mainly for flexible packaging and household foils added 1.8% year on year, while thicker gauges, used typically for semi-rigid containers and technical applications, showed a slight increase of 0.3%. Total domestic deliveries were ahead by 0.6% in the period, while exports improved strongly, by 5.7%. In the final three months of 2017 deliveries to non-European markets increase by 37.2%. ///

#### *Alufoil Trophy 2018 – the winners*

/// Consumer Convenience

## **Creating convenience for medicines and food**

— Single use inhaler for mass consumption and skin packaging of food directly on to alufoil offer ultra convenience

A thermoformed dry powder inhaler the PERLAMED-BLISTair® from **Perlen Packaging**, which can be manufactured on a standard blister machine, incorporates an aluminium foil lid and opening system, which enables single use inhalers to be produced.



Perlen Packaging -PERLAMED-BLISTair®

Many patients in third world countries have incomes of less than \$1 per day and cannot afford to buy an expensive injection moulded device with 30-60 inhalations. The PERLAMED-BLISTair®

brings that medication within their reach in single dose format and can enable a local supplier to produce them on a standard piece of packaging equipment. The device is hygienic, easy to handle, very efficient in material use and can be purchased at a competitive cost. So it is ideal for short-term and acute therapies which may require only a few inhalations. ///

An innovative skin packaging concept for chilled or fresh foods, such as fresh fish, the Ready2Cook® Skin Packaging Solution, from **Plus Pack**, offers maximum flexibility for the consumer as it can easily go directly from the chilled cabinet to the oven, or even BBQ.

Full surface skin packaging offers a hermetically sealed food safe solution which improves the shelf life of the contents by several days, compared to traditional modified atmosphere containers with a



Plus Pack - Ready2Cook® Skin Packaging Solution

sealed film lid. Once the skin packaging is removed the aluminium container makes a perfect cooking tray.

The low height and handles of the container makes it easy to transport and store for the consumer. If they decide to buy several products at the same time, the skin packaging solution means they can keep fresh foods for an extended period in top condition. Plus, the aluminium container is fully recyclable. ///

/// Marketing + Design

## Foil makes the difference with on shelf impact

— Stand out shelf impact and customer appeal from two different aluminium foil technologies

A new embossing technique for aluminium closures, the Embossment on Talog® has been developed by **closurelogic**, which enables embossing of logos and lettering on the top of the cap, to enhance the appeal, branding possibilities and quality image of the company's Talog® premium closures.

The judges agreed, "This opens up possibilities for branding and design which will appeal to soft

drinks and water producers and consumers alike." Closurelogic says it is



closurelogic – Embossment on Talog®

following the trend of its customers to upgrade to higher quality roll-on closures. The technique enables them to add distinctive contours and letters on the top of the screwcap, reinforcing the brand message displayed elsewhere on the bottle. This feature can be added to the existing aluminium roll-on closures systems offered by the company, such as Talog®, Star-Log and Alu-Star, which are suitable for any kind of beverages. ///

Cat Milk in Aluminium Portion-Packs, are made by **Constantia Flexibles** for animonda petcare. The Milkies brand, contain 15g of cat milk with healthy additives and are the only portion packs using an aluminium capsule/lid system for this kind of product available in Europe.

"This is a very 'on trend' product," said the judges. "The whole concept is eye catching and will appeal to pet owners and it certainly stands out on the shelf." Four varieties of Milkies are



Constantia Flexibles - Cat Milk in Aluminium Portion-Packs

available, and they can be served as a topping on food or added to drinking water. The aluminium foil lid is printed in striking and appealing colours to identify each flavour, while the capsule is lacquered in gold to give it a very high-quality look and feel. The barrier properties of the alufoil ensure the product can be kept in perfect condition over a 12-month shelf life. ///

/// Technical Innovation

#### Foil gets clever with can ends, closures and LED

— Peelable can end and new closure technology offer market expanding possibilities, plus LED lighting simplified

The latest peelable can end from **Amcor Flexibles**, the AluFix Retort Xtra is the first aluminium foil can end able to withstand aggressive products such as tomato sauce, sauerkraut, fish in white wine and similar products.

The judges were impressed by the can end's ability to cover a broad range of products, like pickles, dips, tomatoes sauces or seafood that are highly acetous, or which have salts or spices in them. The Retort Xtra's composition has been designed specifically for environments with low pH values and high levels of these substances. It is sealable on PP lacquered tinplate and is suitable for all current retortable production capabilities. Amcor says it should gain wide acceptance with both the canning industry and consumers due to the safe and easy opening and materials and energy saving in the manufacturing cycle. ///



Amcor Flexibles – AluFix Retort Xtra



Guala Closures - Imagic

A ground breaking piece of technology transfer has given **Guala Closures** the potential to make aluminium closures in virtually any unique shape.

The Imagic uses Electro Magnetic Forming (EMF), first developed for military use, to create almost any shape, including round, pyramidal and precisely decorated. The effect is achieved by placing an aluminium shell over a plastic 'skeleton' or mould. Using EMF the shell takes the shape of the mould. The judges felt this showed, "Clever and original complementary technologies have been used to bring a new dimension to the closure sector." The finished product is very resistant and so avoids dent problems, both during production and transportation. The closures combine the functionality of plastics with the aesthetics of aluminium. ///

Stogger BV of the Netherlands has worked with Novelis Deutschland to create Stogger Wireless Lighting, a simple and less labour intensive wireless LED lighting solution, using aluminium foil to carry the electric current.

The aluminium foil replaces wired assemblies. The PowerBoard is a recycled PET panel, laminated with three layers of aluminium alloy AA 1200 and the wireless LED lights are just screwed anywhere into the surface. The layers of aluminium foil are excellent conductors of electricity and enable the modules, or letterboxes, to be made in many intricate shapes and sizes, quickly and with the potential of using automated assembly methods. Additionally, the LED modules achieve seamless light distribution using the company's square lens technology. ///



/// Product Protection

#### New ice age

— New ambient pack for in-shop and at-home freezing of dairy and juice based products

**Tetra Pak**'s new single-portion pack for juice and dairy products, the Tetra Fino® Aseptic 100 Ultra MiM, features a thin aluminium foil inner layer which enables the contents to be kept for long periods at ambient temperatures, plus they can be turned into frozen treats, with minimal changes to existing dairy and juice manufacturing processes.

The aseptic processing and packaging means the product does not need preservatives to maintain its

nutritional values. The thin layer of aluminium helps to maintain the colour, texture and taste of the contents for at least four months without refrigeration and allows the product to retain its nutritional value while being distributed at room temperature. The company says it gives their customers the opportunity to tap into the ice cream market without additional investment in production equipment. No requirement for a cold chain also means energy savings across the entire value chain. ///



Tetra Pak - Tetra Fino® Aseptic 100 Ultra MiM

/// Resource Efficiency

#### Laminates offer improved sustainability

— New foil laminates offer material savings with stick pack format for sensitive medicines and extruded coffee pouches

A new laminate the Polylnert Laminates for Stick Packs from **Amcor Flexibles**, enables sensitive pharmaceuticals to be packed in stick packs for the first time.



Amcor Flexibles - Polylnert Laminates for Stick Packs

This is achieved using a multilayer barrier laminate with aluminium foil that has a contact layer specifically developed with low scalping properties. This improves the shelf life of the product as well as helping to reduce both the pack size and its carbon footprint. The reduction in pack size, compared

with traditional formats, can achieve as much as 40% materials savings, as well as greatly reduced water and energy use. Using the new laminate with foil minimises the interaction between the drug and the film, so the active pharmaceutical ingredient in a volatile drug does not become absorbed in the contact layer. ///

A new 3-layer laminate, Lamineo, developed specially for the coffee sector by **Huhtamaki Flexible Packaging**, uses extrusion rather than adhesive in its construction, to reduce the amount of PE by up to 20%, without any loss of performance or rigidity.

The judges said "The look, feel and printability are first class and the packs offer excellent rigidity and easy opening. Material saving is significant."

Between the PET and aluminium foil an extrusion layer is placed instead of adhesive. This layer increases the distance between these two



Huhtamaki Flexible Packaging - Lamineo

dimensionally stable materials, which strengthens the rigidity. The material can operate on any current flow-wrap machine, without the need for modification and without loss of production speed. Additionally, the adhesive free lamination helps to reduce the NIAS (non-intentionally added substances) in any analysis, a major challenge for food contact materials. ///

#### Major gains for aluminium closures in wine sector

Aluminium closures now account for just under 30% of the total global bottled still wine market, according to research recently conducted by Euromonitor. With 30 billion bottles sold worldwide in 2016, the aluminium closure market size is now around 9 billion units annually. This shift towards aluminium screwcaps is particularly evident for the largest still wine markets – Europe and USA.

Europe still represents the largest market for bottled still wines with volumes of more than 17 billion in 2016, according to other research by IWSR, which looked at 0.75L equivalent bottle measurement units.

Both reports show a decline in bottled still wine volumes in Europe of between 5.3 and 6.4% in the five years under study.



But aluminium closures made significant progress in the same period, growing by 14.5%, with a CAGR of 5.2%, from 2012-2016.

The situation in the USA continues to show a strong market for wine with aluminium closures. The number of 0.75L bottled wines of all varieties sold in 2016 increased 4.4% versus 2015, according to the study by IWSR. Sales reached over 3.8 billion bottles. Euromonitor confirms that aluminium closures accounted for 44.9% of all sales of bottled wine in the US in that year. The CAGR for aluminium closures in the US for the five-year period was 6%. ///

Sources: Euromonitor International, IWSR and EAFA

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The international body representing foil rollers and manufactures of alu closures, containers, household foil and all kinds of flexible packaging.