

CANS OF THE YEAR AWARDS

As a beacon for the metal packaging industry's sustainability message, the overall winner of the Can of the Year for 2011 is as good as it gets.

Japan's Toyo Seikan has been promoting and developing the manufacture of food and drinks cans with low environmental impact for almost two decades. Now, its TULC technology is being established in wider markets and the can that won the award this year reaches new heights by being used for processed coffee drinks for the first time.

The winning 20cl can used by Thailand's Ajinomoto for its Birdy coffee uses sTULC manufacturing processes that dramatically cut energy use, carbon dioxide emissions, consumable waste and don't require the consumption of water.

It's manufactured at Next Can Inno-



**General line –
Brasilata SA (Brazil)**



**Beverage three-piece –
Ardagh Metal
Packaging Germany
GmbH (Germany)**



**Bottles –
Rexam Beverage
Can Europe (UK)**



**Food three-piece –
Sarten Ambalaj
Tic AS (Turkey)**



**Food two-piece –
Ardagh Metal
Packaging West
France (France)**



**Aerosols –
Ball Aerocan
(Czech Republic)**



**Ends, caps & closures –
Crown Closures
Europe (UK)**



As good as it gets



The winner of the Can of the Year for 2011 shows how it is possible to reduce dramatically the environmental impact of canmaking technology. John Nutting reports

vation factory, a joint venture between Swan Industries and Toyo Seikan, where 'dry-DWI' techniques are used that eliminate the lubricants commonly employed in two-piece draw and wall-iron beverage can production world wide.

The can also saves on resources. Com-

pared with the 20cl three-piece welded steel cans widely used in the Japanese market for coffee – a market of some 10 billion a year – the sTULC can is 30 per cent lighter.

Toyo Seikan chose the Thai canned coffee market to launch with the Birdy brand



Can of the Year & Beverage two-piece

Toyo Seikan's coffee can for the Birdy brand in Thailand is unassuming but it contains a huge amount of environmentally strong technology, such as dry-DWI bodyforming that doesn't need as much lubricant, thereby saving washer chemicals and polyester coatings that don't have to be applied with solvents. It's also lighter by 30 percent than equivalent three-piece vacuum cans.



Fancy cans – Crown Speciality Packaging (UK)



Prototype – Can-Pack SA (Poland)



Decoration & print quality – Hangzhou CPMC Co (China)

because it is one of the fastest growing in the region. Since it appeared at the beginning of 2010 more than a billion have been produced.

Novel features of the canned coffee include the use of low-pressure nitrogen filling and non-destructive testing of the filled product by tapping the can and measuring its resonance. This is a process that is specific to the steel can and cannot be used with aluminium.

Toyo Seikan, which produces seven billion TULC cans in their various forms in the Asian markets on 23 production lines, plans to further expand TULC's use in its march to promote the environmentally friendly message.

"We think that dry-DWI should ideally replace conventional DWI," said Ludovic Toutou, international operations chief at Toyo Seikan. "We can say that this technology ▶

CANS OF THE YEAR AWARDS

represents a great environmental improvement on conventional DWI cans. Also, compared with the original TULC system, it opened the perspective for even further lightweighting, and it is possible that this technology might become the replacement generation.”

The Cans of the Year judges were also excited by the Orbit twist-off closure developed by Crown Closures Europe in the UK.

The Orbit closure, which easily won Gold in the Ends, caps & closures category, has already been applauded as a major advance in packaging convenience (see *The Canmaker*, September 2011). Twist-off vacuum closures for glass jars have presented a challenge to less-able consumers, and even some of those who are able, because they need the application of a large amount of torque to overcome the grip of the sealant.

The answer was a patented two-part closure with an outer ring connected to a panel that includes the sealant. Because the outer ring doesn't rotate with the panel the opening torque is lower before

the seal is released.

Whereas a 70mm-diameter twist-off lid typically requires around 40 inch-pounds of torque to open, “an Orbit closure typically only requires around 15 to 20 in-lbs to loosen the ring and 10 to 25 in-lbs or torque to break the vacuum seal. Opening torques will remain at these levels, no matter how long a product is stored,” said Paul Dunwoody, leader of the Orbit development team.

The judges were overwhelming in their praise for Crown's Orbit twist-off closure. One judge tried it and said: “It's brilliant, and what we've been wanting for years!”

Other Gold winners in the 11 categories marked worthy developments in canmaking technology.

In the Aerosol category it was a new name in the sector that was the winner. US-based Ball Corporation had never produced monobloc aluminium aerosol cans

until it acquired Europe's Aerocan earlier this year, but it was the group's plant in the Czech Republic that won with a 30ml can made for the G.Bellini deodorant and



CAN OF THE YEAR 2011

Toyo Seikan Kaisha Ltd (Japan): Birdy coffee with milk in 20cl polyester-coated Dry-DWI steel can for Ajinomoto Co (Thailand) Ltd

AEROSOL CANS

GOLD: Ball Aerocan (Czech Republic)
G.Bellini deodorant and shaving products in 30cl embossed impact-extruded cans for Win Cosmetics GmbH & Co, part of Dalli Werke GmbH

SILVER: DS Containers (USA)

Reddi-wip whipped cream aerosol in polyester-coated drawn two-piece can for ConAgra Foods

BRONZE: Tubex GmbH (Germany)

Nivea styling hair mousse in 15cl impact-extruded can with necking and internal powder coating for Nivea Polska

BEVERAGE THREE-PIECE

GOLD: Ardagh Metal Packaging Germany GmbH (Germany)
Raderberger Pilsner 3.1-litre keg in welded and shaped tinplate for Raderberger Brewery

SILVER: Daiwa Can Company (Japan)

Georgia Triple Star Premium Coffee in 25cl welded and beaded can with gravure printed laminate for The Coca-Cola Co, Japan

BRONZE: Huber Packaging Group (Germany)

Kronenbourg 1664 5-litre party keg in welded and shaped tinplate using CO2 Drafting system for Brasseries Kronenbourg France

BEVERAGE TWO-PIECE

GOLD: Toyo Seikan Kaisha Ltd (Japan)

Birdy coffee with milk in 20cl polyester-coated Dry-DWI steel can for Ajinomoto Co (Thailand) Ltd

SILVER: Ball Packaging Europe (Germany)

Foster's lager in 56.8cl DWI aluminium can with special finishes for Heineken UK Ltd

BRONZE: Rexam BCA (USA)

Rockstar Recovery 71cl aluminium D&I can with Cap Can closure for Rockstar Inc

BOTTLES

GOLD: Rexam Beverage Can (UK)

Oc6o beauty drink in 25cl aluminium D&I bottle for Pure Products GmbH

CATEGORY WINNERS

SILVER: Ball Corporation (USA)

Miller Lite beer in 16oz Alumi-tek aluminium D&I bottle for Miller Coors Brewing

BRONZE: Daiwa Can Company (Japan)

Petit Monteria wine in Bordeaux-style polyester-coated two-piece aluminium bottle for Monde Shuzo

DECORATION & PRINT QUALITY

GOLD: Hangzhou CPMC Co (China)

Tea caddy in porcelain-style decorated tinplate for COFCO Group

SILVER: GM Metal Packaging (Hong Kong)

Octagonal tinplate container with holographic effects for Ringtons

BRONZE: Rexam BCA (USA)

Busch beer aluminium 24oz beverage can for Anheuser-Busch InBev

COMMENDATION: Crown Speciality Packaging (UK)

Limited-edition 50g slip lid tin with soft touch varnish for Imperial Tobacco's Golden Virginia brand

ENDS, CAPS & CLOSURES

GOLD: Crown Closures Europe (UK)

Two-part Orbit tinplate twist-off closure for preserves produced by F. Duerr & Sons Ltd

SILVER: Ardagh Germany MP GmbH (Germany)

Sealite 80/83mm gas-proof membrane lid attached to tinplate three-piece can for undisclosed customer

BRONZE: Blechwarenfabrik Limburg GmbH (Germany)

Cliqloc resealable promotional beverage cap for Cliqloc GmbH

FANCY CANS

GOLD: Crown Speciality Packaging (UK)

Embossed three-piece Jam Cream Sandwich tin for Marks & Spencer and Fox's Biscuits

SILVER: Crown Speciality Packaging (UK)

Secondary container with embossed decoration for Gordon & Macphail Ltd's Benromach 20cl whisky bottle

BRONZE: Meister SA (Brazil)

Conical decorated tin with two-piece lid for Nostalgia brand

COMMENDATION: Crown Speciality Packaging (UK)

Rectangular limited-edition embossed cake tin for the Royal Wedding commissioned by HRH The Prince of Wales

FOOD THREE-PIECE

GOLD: Sarten Ambalaj Tic AS (Turkey)

Shaped tinplate can with press lid for olives for Namli Zeytinleri Ltd

SILVER: Shetron Ltd (India)

Tinplate can for Treo brand of Pristine Organics

BRONZE: Shetron Ltd (India)

Tinplate can with aluminium membrane seal and plastics cap for Hindustan Unilever Ltd's Grand Classic coffee

FOOD TWO-PIECE

GOLD: Ardagh Metal Packaging West France (France)

Deep drawn aluminium Ijsselelijk ham can with Optilift end for Zwanenberg Food Group in The Netherlands

SILVER: Ardagh Metal Packaging West France (France)

Rectangular drawn aluminium luncheon meat with Optilift end for Zwanenberg Food Group

BRONZE: MGK-pack dd (Croatia)

Double reduced drawn tinplate quarter club can for various customers

GENERAL LINE CANS

GOLD: Brasilata SA (Brazil)

20-litre tapered tinplate pail for putty or powdered products for Anjo Química

SILVER: Hoffmann Neopac AG (Switzerland)

Freshpack hinged lid tinplate can with tamper-evident membrane for Ricola pastilles

BRONZE: Pirlo GmbH & Co (Austria)

Tinplate slip lid can with matt finish for Salewa outdoor clothing products marketed by OberAlp SpA-AG

PROTOTYPE

GOLD: Can-Pack SA (Poland)

Lazer etched beverage end on 55cl aluminium beverage can

SILVER: Rexam (Mexico)

Various decorative effects on aluminium beverage cans

BRONZE: Tubex GmbH (Germany)

Let's Dance aluminium aerosol can with 'three-dimensional' embossing

CANS OF THE YEAR AWARDS

Silver winners all: From left to right: Ball Packaging Europe's one-pint beer can for Foster's (Beverage two-piece); Ball Corporation's Alumi-tek bottle for Miller (Bottles); DS Containers polyester-coated drawn aerosol can for Reddi-wip (Aerosol cans); Crown Speciality Packaging's secondary can for Gordon & Macphail whisky (Fancy cans); Daiwa Can's 20cl can for Coca-Cola's Georgia coffee (Beverage three-piece); GM Metal Packaging's holographic effect caddy for Ringtons (Decoration & print quality); Ardagh Germany MP's gas-proof aluminium membrane (Ends, caps & closures); Hoffmann Neopac's Freshpack for Ricola pastilles (General line cans); and some of Rexam Mexico's special effects for beverage cans (Prototype)



shaving brands. The 53mm-diameter can featured deep embossing and debossing with registered decoration and comes in three sizes – 20cl, 25cl and 30cl.

The Three-piece beverage category was once confined to simple juice and coffee cans, but in the last decade has now included the growing beer-keg format, which started with beautifully decorated 5-litre shaped cans that are now augmented by long-life pressure systems and sophisticated pouring devices.

Ardagh Metal Packaging, which until the merger last year with the Ardagh group was Impress, recently launched a 3.1-litre version of the keg that won Gold in Three-piece beverage. The container is more easily stored in a refrigerator, thereby expanding the market, but still comes with all the conveniences of pouring the beer. German beer brand Raderberger Pilsner was first to enjoy its benefits.

Winner of the Bottles category was Rexam Beverage Can Europe with its Fusion bottle which it has been developing for about five years. Lightweight aluminium bottles using D&I manufacturing techniques such as those used by Rexam have been available for two years, with the Fusion making its commercial debut earlier this year.

Manufactured at Rexam's plant in the Czech Republic, the winner was produced in a 25cl size for German customer Pure Product's Océo beauty drink.

Decoration & print quality has always been tricky to judge because of the challenges presented by the technical differences between lithography on sheet and on the round, as in beverage can printing.

But the judges were agreed that Hangzhou CPMC's tea caddy made in China was an amazing piece of work, and

well deserving the Gold award, reproducing the look of porcelain on an embossed rectangular lidded container made for CPMC's parent company COFCO.

Since there were so many entries for this category, it's worth mentioning the clever Rington's caddy from GM Metal Packaging in Hong Kong and the stunning Busch beer beverage can made by Rexam in North America. This in particular stood out from all the other beverage cans in the decoration category.

Fancy cans are supposed to be "what they say on the tin", covering a huge range of creative approaches to using decorated metal. The Jam Cream Sandwich tin made by Crown Speciality Packaging in the UK is what decorative fancy cans are all about. It takes the jam sandwich biscuit product and reproduces it as an embossed container with gloss and matt varnishes that enhance the effect of the tin, which is made to contain 20 standard size biscuits.

These cans are attractively designed to be kept and used for all kinds of products, which is probably just what customers Marks & Spencer and Fox's Biscuits wanted.

Turkey's Sarten Ambalaj offered a novel 2.5kg container for packing olives that won Gold in the Three-piece food category. In addition to being expanded to improve its appearance and enable the use of thinner 0.23mm tinplate, it uses a press lid so that customers like Namli Zeytinleri don't have to invest in seaming equipment. The lids are supplied separately and closed tightly enough for shipping, rather lid a paint can.

Often it's not always immediately obvi-

ous where the benefits of a can lie, such as Toyo Seikan's Birdy can. Likewise with the Two-piece food Gold winner made by Ardagh Metal Packaging in France for Zwanenberg.

This deep drawn oval aluminium container for Ijsseldijk-branded ham is highly decorated, requiring distortion printing techniques, and is fitted with the latest Optilift easy open end that features better accessibility for the tab.

The General line Gold winner was the Lean Pail developed by Brasilata and used for 'Super Leve' (Super Light) plaster marketed by Anjo Química do Brasil.

Following two years of research, the São Paulo-based canmaker produced a tapered stackable 18-litre pail that is 35 percent lighter than conventional steel pails by using 0.22mm tinplate, rather than 0.34mm.

The Brazilian market for plaster uses around 13 million 18-litre containers a year, of which more than half are currently cardboard barrels, said Brasilata's chief executive Antonio Teixeira.

"Nowadays only six million are packaged in 18-litre steel cans while ten years ago the market belonged totally to 18-litre square cans," he said. "The new Lean Pail was created not only to defend the rest of the market but to reconquer part of the lost market share."

The Prototype category offers canmakers the opportunity to showcase what they are developing. This year Polish-based canmaker Can-Pack won Gold with a new style of laser-etched beverage end. Unlike some earlier versions, the designs are positioned in relation to the tab and enable the decoration on the end to match the can body.