

Marriage of convenience

The Can of the Year for 2010 was a full-aperture easy-open end for beer cans that married food and beverage end technology to provide a safer drinks container for sports events. John Nutting reviews the winners



1
GOLD WINNER
2010

1: Prototype – Tubex (Germany)

This aluminium can meets a number of key sustainability goals, firstly by using 20 percent recycled metal in its manufacture along with powder-based internal coatings that are VOC free along with an external water-based basecoat and varnish

2: Beverage Three-Piece – Daiwa Can Company (Japan)

The sheer quality appearance of this highly-decorated three-piece welded can to meet the requirements of pasteurised coffee, a popular sector in Japan, impressed the judges highly

3
GOLD WINNER
2010

3: Decoration & Print Quality and Fancy Cans – Dongguan GM Metal Products Co (Hong Kong)

As a demonstration of the craft of metal decorating this double-category-winning advent tin from GM Metal Products in China was way ahead of the pack, according to our decorating expert. The print quality of the tin is superb throughout. This container also won the Fancy Cans category for its sheer complexity and audacity because it also includes a music box



4
GOLD WINNER
2010

4: General Line Cans – Brasilata (Brazil)

Food catering in Brazil is a sector that has traditionally been using 20-litre plastics containers but Brasilata has introduced its Plastplus decorated steel pails to add a touch of class, and the ability to be stacked higher than plastics. It uses a plastics lid that can be repeatedly opened and closed with ease

CANS OF THE YEAR AWARDS

Easy-open ends for drinks cans revolutionised the business, helping expand worldwide sales to more than 250 billion a year. The performance requirements are so high that a significant change in their design is rarely risked – until this year, when the FIFA World Cup in South Africa provided the opportunity to develop the first full-aperture version for a beer can.

Such was the impact of the Event Can version of Crown's SuperEnd

that the judges for the Can of the Year 2010 organised by *The Canmaker* magazine selected it without question from what was agreed to be an already high-quality selection of Gold award winners.

The idea behind the end design was to find a can that could elbow into the market for drinks containers at sports events where concerns about safety had enabled plastics bottles and cups to take over.

By offering a can with a full aperture (FA) it could be more quickly served open

at the bars during the World Cup and at other events.

South African Breweries, part of the global SABMiller brewing group, first approached Paris-based Crown Bevcan in 2008, and after discussing various solutions it was decided to fit full-aperture easy-open ends onto the cans, so that they could be used like drinking cups.

Objective was to use the ends on a limited edition of SAB's Castle Lager, distributed through bars in the tournament ▶

7: Beverage Two-Piece – Toyo Seikan Kaisha (Japan)

These are the first 50cl aluminium cans to be made outside of Japan using Toyo Seikan's aTULC process featuring a polyester coating. At Toyo Seikan's new plant at Guangzhou in China, the dry-DWI process meets increasingly important sustainability goals of customers by cutting the amount of curing-oven energy and waste water required in manufacture

8: Food Three-Piece – Crown Food Europe (France)

Bonduelle, the French-based canned vegetable producer, has launched its Vapeur range of high-quality products that are heat processed using less liquid in the can. It is enhanced as a complete package by the use Crown's can with an Easylift easy-opening end – a first on vegetable cans – on which the decoration is matched to the label design

9: Bottles – Daiwa Can Company (Japan)

This 12cl bottle made by Daiwa for House Foods is a new size and made from polyester-laminated aluminium coil using D&I techniques



5: Food Two-Piece – Metalgráfica Renner (Brazil)

Brazilian cookie manufacturer Dauper keeps its products fresh with this clever use of a decorated drawn tin using a slip lid made by Renner. The vacuum is released to open the can by peeling off a seal in the lid that covers a hole. It's a two piece can, but not as we know it

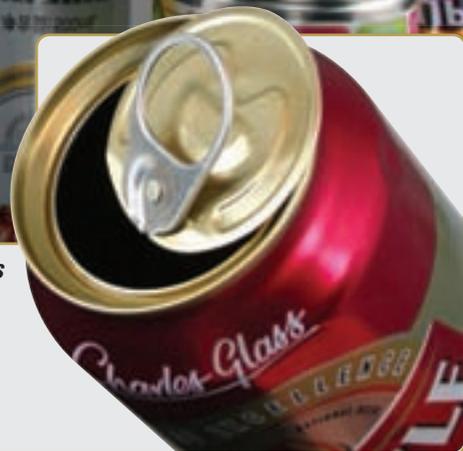
6: Aerosol Cans – Boxal (France)

This aluminium monobloc can uses an inside curl bead developed by Boxal that raises tightness performance to meet the high-pressure requirements of new compressed gas applications

CAN OF THE YEAR 2010

10: CAN OF THE YEAR and Ends, Caps & Closures – Crown Bevcan Europe & Middle East (France)

Developed for use during this year's FIFA World Cup in South Africa, this latest full-aperture version of Crown Bevcan's lightweight SuperEnd facilitates serving at bars and easier drinking from the opened beer can, eliminating the need for glass or plastics containers



stadia in tinfoil 33cl and 44cl cans made by Nampak in South Africa – with SAB tracking the response of consumers.

Development of the FA version of the SuperEnd – which itself was launched ten years ago to provide further lightweighting opportunities – involved 18 months of trials in which Crown exploited its expertise in food and beverage end manufacturing to meet SAB's requirements.

The 206 end is based on Crown's existing SuperEnd technology, in which the profile is reformed during the seaming process to enable higher pressure performance with a lower gauge. Crown already supplies full-aperture easy-open lids for snack applications, but the demands of having to meet high-pressure performance required a number of design modifications to ensure that the end performed satisfactorily during the seaming and pasteurisation processes.

The opening process was also a major issue, along with the release of internal pressure as the tab is lifted. When the tab is pulled, a section of the end dips into the can, enabling leverage to be applied to the score to complete the opening. Crown's engineers also ensured that once opened, the exposed edge of the aperture was smooth for drinking.

The end shells for the launch cans were made by Nampak but converted in the US using a modified food end press before shipping back to South Africa. The shipping proved a problem because the ends never made it in time for the World Cup, but are almost certainly going to be used at other competitions in Europe on SAB-Miller's beers such as Pilsner Urquell.

Crown was one of three canmakers to win two Gold awards in Cans of the Year 2010, its other award coming from its involvement with a new type of canning process for vegetables developed at French packer Bonduelle.

Crown Food Europe has long supplied Bonduelle with three-piece welded steel cans and its Eole full-aperture ends but this time the new Vapeur process, aimed at offering the consumer a more fresh-tasting and crisp product such as peas or beans, presented some new challenges.

Vapeur is a steam retort heating process in which less liquid is used in the 83x85mm can and is said to improve the flavour of the vegetables while retaining colour and nutritional value. For the launch on the French market Crown Food Europe is providing its Easylift steel end featuring ring pull with better finger access for consumers while being interchangeable on customers' closing machines and filling lines.

Hong Kong-based GM Metal Products won two Gold awards with the same

CATEGORY WINNERS

CAN OF THE YEAR 2010

Crown Bevcan Europe & Middle East:
Full-aperture beverage end on Castle Lager Event can for SABMiller

AEROSOL CANS

GOLD: Boxal (France)
Solar Expertise Sun Cream spray aluminium monobloc can for L'Oréal
SILVER: Sarten (Turkey)
Caba deodorant three-piece tinplate can for Caba Italy/Beauty of Today
BRONZE: Exal Corporation (USA)
Lemon Dijon Pure Indulgence Topping monobloc aluminium can for Lé Foam LLC

BEVERAGE THREE-PIECE

GOLD: Daiwa Can Company (Japan)
Boss Gold Presso steel three-piece coffee can for Suntory Foods
No other awards

BEVERAGE TWO-PIECE

GOLD: Toyo Seikan Kaisha (China)
Kingway and Pearl River aTULC aluminium beer cans for Kingway Brewery (Foshan) Co & Guangzhou Zhujiang Brewery Group
SILVER: Daiwa Can Company (Japan)
Final Fantasy XIII D&I aluminium drinks can for Suntory Foods
BRONZE: SMYPC Metal Container Plant (Philippines)
La Natural Coconut Juice D&I aluminium 33cl cans for Mabuhay 2000 IMEX Co

BOTTLES

GOLD: Daiwa Can Company (Japan)
Ukon No Chikara Super drink aluminium D&I mini-bottle for House Foods
SILVER: Exal Corporation (USA)
Blues Golden Ale aluminium monobloc 22oz bottle for 16 Mile Brewery
BRONZE: Boxal (France)
Kidibul sparkling fruit juice aluminium monobloc bottles for Stassen

DECORATION & PRINT QUALITY

GOLD: Dongguan GM Metal Products (Hong Kong)
Christmas Advent Calendar hinge lid decorated tin containing internal slip lid tins for Gawol
SILVER: Meister (Brazil)
Slip lid tinplate 'Butterfly' tin for Meister promotion
BRONZE: Exal Corporation (USA)
Team RealTree Outdoor Energy impact-extruded aluminium bottle for J&M Concepts LLC
Commended: CPMC Holdings (China)
Commended: Crown Speciality Packaging (France)

ENDS, CAPS & CLOSURES

GOLD: Crown Bevcan Europe & Middle East (France)
Full aperture easy-open beverage end for Castle Lager Event can with full-aperture easy-open beverage end for SABMiller
SILVER: Impress Group (The Netherlands)
Nan Infant Formula three-piece decorated can with Deep-

Drawn membrane lid and Easy Scoop for Nestlé Nutrition
BRONZE: Impress Group (The Netherlands)
OptiLift steel full-aperture easy-open end for William Saurin
Commended: Crown Food Europe (UK)

FANCY CANS

GOLD: Dongguan GM Metal Products Co (Hong Kong)
Christmas Advent Calendar hinge lid decorated tin containing internal slip lid tins for Gawol
SILVER: Jiabao Packaging Depot (China)
Mighty Beanz drawn two-part can with all-over decoration for Moosetoys
BRONZE: Glud & Marstrand (Denmark)
Shaped palm-sized snuff can with plastics insert for Swedish Match

FOOD THREE-PIECE

GOLD: Crown Food Europe (UK)
Three-piece tinplate can with Easylift easy-open end for Bonduelle Vapeur
SILVER: Rimet (Brazil)
Three-piece steel can with membrane lid for Nestlé Brasil infant formula
BRONZE: Metalúrgica Mococa SA (Brazil)
Nescafé Cappuccino expanded three-piece tinplate can for Nestlé Brasil Ltda

FOOD TWO-PIECE

GOLD: Metalgráfica Renner (Brazil)
Cookie container with drawn body and slip lid and vacuum seal for Dauper
SILVER: Franpac (Massilly Group) (France)
Les Dieux drawn tapered aluminium fish can for Gendreau
BRONZE: Impress Group (Italy)
Cirio drawn decorated can with Easy Peel closure for Conserve Italia

GENERAL LINE CANS

GOLD: Brasilata (Brazil)
Trifry food catering Plastplus steel tapered pail for Triângulo Alimentos
SILVER: Brasilata (Brazil)
Lazzudur paint Top-gun three-piece steel ringless pail for Sherwin-Williams
BRONZE: Companhia Metalúrgica Prada (Brazil)
Brasso polish three-piece steel can with plastics closure for Reckitt Benckiser
Commended: Pirló - Metal Packaging (Austria)
Commended: Industrias Sanz (Spain)

PROTOTYPE

GOLD: Tubex (Germany)
Monobloc aluminium aerosol can with powder coating
SILVER: Companhia Metalúrgica Prada (Brazil)
Steel microwaveable can with easy-open end and plastics closure
BRONZE: Reichsfeld - Metal Packaging (Austria)
Steel welded SI-Can general line can with handle

entry: its Christmas Advent themed container. Produced at GM's Dongguan factory in China, the tin won in both the Fancy Cans and Decoration & Print Quality categories. As a fancy can it has almost everything: the appealing winter-decorated house shape and when you open it the 24 smaller square tins for the days leading up to Christmas, topped with a music box. Its printing quality was also spectacular, said the lithography expert on the judging panel.

Japan's Daiwa also won two Gold awards, for Bottles and Beverage Three-piece. Its winning bottle was a new 12cl

size made from film-laminated aluminium coil for the Ukon No Chikara brand of nutritional drink from House Foods. In Beverage Three-piece, Daiwa's winner was a shaped and embossed can for 185g of Boss ready-to-drink coffee from Suntory.

What many consider as a breakthrough technology for canmaking with the highest environmental standards was the Gold winner in the Beverage Two-Piece category. Japan's Toyo Seikan first developed its TULC process almost two decades ago to use polyester-laminated canstock that enabled lubricant washing and much of the ink curing and coating process to be elimi-

nated from the canmaking process, reducing plant emissions. Demonstrating that its technology is competitive in China, Toyo Seikan's award-winning 50cl cans are made with the latest 'dry-DWT' technology with aTULC co-extruded aluminium canstock at its latest plant in Guangzhou.

Environmental concerns were also behind the Gold winner in the Prototype category, Tubex, which has developed its aluminium aerosol cans using powder-based internal coatings and water-based externals. This enables, along with the use of part-recycled aluminium for the body, a stronger sustainability message to be communicated by customers.

The Ends, Caps & Closures category was tightly contested. While Crown won with its full-aperture beverage end for Castle Lager, it was a close-run race with Nestlé's Nan infant formula can. This uses a new Deep-Drawn lid with a membrane end developed by Impress that enables the usual plastics scoop supplied to be housed without being placed in the product. While that won the Silver award, Impress also scooped the Bronze with the latest incarnation of its easy-open food ends. The Optilift end from Impress takes the benefits of offering more finger access under the tab a step further by exploiting the vacuum created in the can during processing to draw the panel away from the tab, creating more space beneath it on cans supplied for French canned food specialist William Saurin.

Nestlé was the customer for two other similar products that were recognised in the awards for Food Three-Piece. Brazil's Rimet designed and manufactured a more conventional but highly-attractive can with a membrane for Nestlé infant formula while Metalúrgica Mococa showed how expanding the top and bottom of the can body enhanced the look of cans for Nescafé Cappuccino.

A Brazilian canmaker also scored in the Food Two-Piece category but not with the sort of can you'd expect. Cookie cans are usually made using three-piece techniques with lock seams and slip lids: for cookie manufacturer Dauper, Metalgráfica Renner provided a solution that ensures the can has a vacuum seal until opened by using a drawn (and highly decorated) body to which the slip lid is a close fit. The centre of the lid has a tiny hole that is sealed by a peel-off label that when removed releases the vacuum, using a principle similar to that developed for wet foods by Brazil's Rojek.

Like the Gold-winning Crown beverage end, Renner showed that crossover technologies are just one route to new innovations in metal packaging. 

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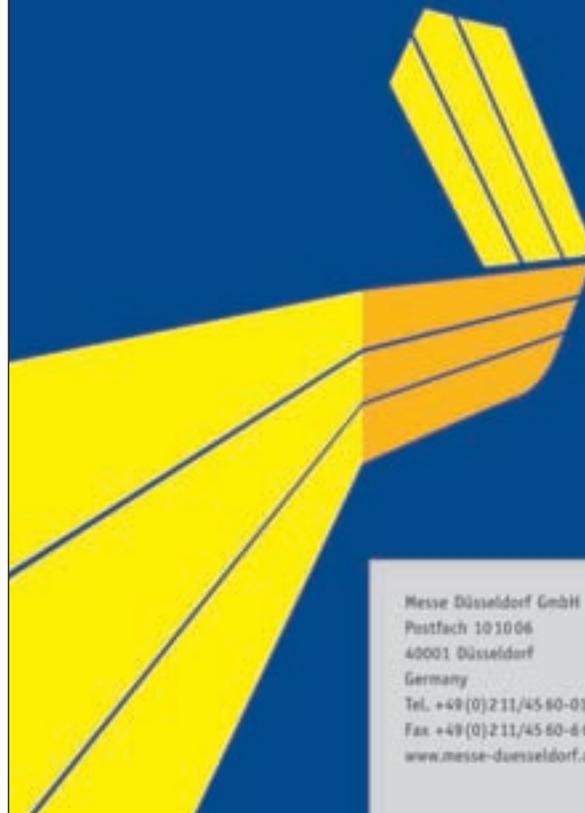
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