

Cannex de las Américas

Vegas

Cannex 2007 in April provided a money-spinning backdrop for a metal packaging industry confident in its growth potential worldwide. Mónica Higuera, John Nutting and Daniel Searle report from Las Vegas

Canmakers came from around the world to Las Vegas in April, and although they may not all have won in the gambling halls, they hit the jackpot at Cannex 2007.

They attended in force looking out for the latest ideas in manufacturing technology. From Argentina to Canada, from Portugal to Saudi Arabia, Japan and Australia, the world of canmaking descended in Vegas for their annual convention Cannex.

And it kicked off with a provocative message from Bill Barker, Rexam's chief executive for global beverage can operations.

"Hedge funds have been driving up aluminium prices rather than the fundamentals of supply and demand," he told delegates.

"Although canmakers could convert to steel, what is needed is the development of another market for aluminium in which inventory is not dominated by the funds. A new business model for the rolling mills is also necessary in which is sourced direct.

"Seven years ago they were predicting the demise of the can but the canmaking world woke up and became more market driven," said Barker. "The industry is working with better equipment, better materials and with a high level of operating excellence with a myriad of new products that add value to brands."

Barker then opened the exhibition by cutting the tape with publisher of *The Canmaker* Allan Sayers.

Amongst the machinery on show there was CarnaudMetalbox Engineering's 3400 beverage can necker making its world debut, Hinterkopf's H240 decorator vying for attention amongst a bevy of body-painted models, Can Man's X1 welder showing how thinner copper weld wire would save money while, the people at Custom Machining Corporation were lining up the hopeful canmakers who wanted to find out more about their new end lining machine.



*Rexam's boss of worldwide beverage can manufacturing Bill Barker cuts the opening tape at Cannex in Las Vegas with Allan Sayers, publisher of *The Canmaker**

Elsewhere, The Canmaker Conference provided a forum for news from the markets and companies showing off their latest ideas.

Impress' chief executive Francis Labbé hosted a press conference in which he revealed that the company was setting up a strategic partnership with ORG, the fastest-growing manufacturer of food and beverage cans in China. In exchange for access to Impress' advanced manufacturing technology, ORG would provide the Paris-based canmaker with a foothold in the expanding Chinese markets.

Carbide tooling designed for canmaking

Two tool alloys designed specifically for canmaking applications were promoted at Cannex by tungsten-carbide preform specialist Vista Metals.

Launched at the show, the VM-S302 material was developed in response to customer demand for high wear-resistance in tooling applications such as ironing rings. It contains six percent cobalt binder material, but is said to be harder and more

hits the jackpot



Cannex attracted the top customers from the drinks and food industries including Anheuser-Busch's packaging chief Mike Harding (pictured on the Sencon booth second from left in the top left image) and Campbell Soup's packaging chief Barbara Bassett (above, left) who brought along programme manager Adrienne Lynn and packaging engineer Laura Laporte. Hinterkopf's H240 decorator vied for attention amongst body-painted models

wear resistant than standard six-percent cobalt grades.

Bodymaker punches, meanwhile, are the primary application of the VM-S201 material, formed from tungsten carbide and one-tenth mixed-metal binder.

CMB launches double seam monitoring system

The hush-hush on-line double seam monitoring system that has been under development by CarnaudMetalbox Engineering Seaming Systems for about six

years but only available to its customers with CMB seamers was launched worldwide at Cannex 2007.

Can seaming 'guru' Peter Moran, who retires this year, revealed during a presentation at The Canmaker Conference that the system will be offered to canners using any kind of seaming machine in food and beverage operations.

Although at earlier World Seaming Conferences Moran had detailed how the double seam monitoring system offered the opportunity to deliver almost defect-free cans to customers, it was only available to those using cans and seaming machines made by CMB as

part of a service provision.

The system functions by using load sensors in the cams that operate the seaming rolls. Data is collected from each seaming head, even on an 18-head beverage can seamer running at 2,000 cans a minute, and transmitted to a processor. Trends in seaming forces are monitored and individual events highlighted, enabling checks to be made when the specifications of the seams start to vary. When faults occur the cans are rejected.

The double seam monitoring system can be retrofitted to any brand of seaming machine but is only available within a rental agreement. ▶



Done deals: Alex Grossjohann of CMC-Kuhnke (pictured left) has tied up with Holger Lübcke of Ibea to work in the North American market, while Amir Novini (above centre) was happy that his company Applied Vision is working with Crabtree's Brian Dodd and Mike Jevons on colour inspection systems

Conveyor compatible with multiple can heights

Drinks can manufacturers are producing increasingly wide ranges of sizes but don't want to waste valuable time changing their conveying systems each time a size change is made.

California-based Pride Conveyance Systems launched a product that offers a quick means of altering the settings on the high-speed air tracks often used in can-making plants.

Techniques existed for changing conveyors for conventional 33cl and 50cl cans but they were too slow and increased downtime.

Pride's answer — which has already been installed at a plant — is to mechanically connect jacking screws on the conveyor so that its height, which has to match the height of the can, is easily adjusted at one location.

The first installation of a system for single air track conveyors was made at Amcor's plant in Auckland, New Zealand.

Savings to be made with thinner copper weld wire

More than satisfied with what he reckons to be between 80 and 90 percent of welder sales in Germany over the past six years, Can Man's Ruedi Umbricht was focusing on offering savings in copper weld wire at Cannex.

With copper now costing almost \$8,200 a tonne there's been good reason to use less of it, even though it's recyclable. Last year Umbricht introduced Imm-diameter wire with a system called Pow-

erFoil and his first customer, canmaker Seung-Il in Korea, is enjoying the cost savings on a Can Man X1 welder.

Using smaller diameter wire is a challenge because it's easy to stretch when heated by current leakage but the X1 is designed to prevent this. And the savings can be huge, he suggests. Compared with using 1.38mm wire on a welder running at a conservative 50m per minute (equivalent of 40kg of copper an hour) he reckons the cost is halved, saving almost \$100,000 a year, depending on the recycling cost.

The savings will be smaller with 1.24mm wire, but are not insignificant. And with automatic height changes, reduced maintenance and lower energy consumption there are other savings — up to 5 percent — to be made, he says.

"As you know, I am a technician, not a dreamer," said Umbricht, "but in fact there is no better deal in regards of the price-performance relationship in the market today ... that's for sure."

Electrostatics help food grade lubricant

The environmental-friendliness of metal packaging is being further improved by a lubricant that isn't based on fossil fuels.

What's more, the lubricant uses electrostatic technology to cling to easy-open ends, DRD applications, tabs, closures, and aerosol cans during the manufacturing process thereby reducing consumption and improving efficiency.

Called Staticgreen, the biodegradable, food-grade lubricant was launched at Cannex 2007 by Avant Garde Technology. It's based on the company's StaticLube product, which is electrostatically charged

so that it is attracted to the object.

The difference is that it's formed from vegetable extracts, rather than being petroleum-based. The result is that it doesn't have any disposal problems, and isn't toxic.

Its performance is said to be as good as the StaticLube lubricant, and in some cases better.

Vision of inspection on metal sheet decorators

Metal decorating press manufacturer Crabtree of Gateshead has tied up with Applied Vision to offer on-line colour inspection systems.

An option on Marquess, C2000 and FastReady presses, the camera-based technology will inspect selected print areas for inspection and reject sheets that are out of specification. It can be retrofitted to existing Marquess and 1290 lines.

Crabtree's Brian Dodds said at Cannex 2007: "By integrating a reliable colour monitoring system, backed by Applied Vision, we're helping our customers take advantage of the best technology the industry has to offer."

The process uses Ohio-based Applied Vision's KromaKing colour inspection system which is specifically designed to verify the accuracy of colour and the overall pattern and detect registration errors, colour shifts and special defects.

With multiple cameras mounted on a gantry above the line, KromaKing scans an area of the sheet and compares it with a master sample selected by the operator. When defined changes occur the system sets off alarms. It can also provide data to support process control. ▶



Wei Gong of Chinese canmaker ORG revealed amazing growth plans at The Canmaker Conference

Market and technical advances at Cannex

Market and technological developments in the canmaking world were highlighted at The Canmaker Conference, reports John Nutting

- Metal bottles are fighting back in the Japanese market where specialized drinks are using screw-top steel containers from Daiwa. Hiroshi Endo detailed the company's latest developments.
- Easy open ends have a history going back more than a century, said Frank La Pera, R&D chief at Sonoco Phoenix. And the latest designs offer even better customer convenience.
- Retorted products are increasingly used peelable ends, reports Reinhart Geisler from Alcan Packaging in Germany. Now a more cost-efficient manufacturing process that wastes less steel is being developed by Rasselstein.
- An integrated range of coatings for easy-open steel ends has been launched by Grace Darex Packaging Technologies, said Russell Bennett. Called Apperta, the range meets increasingly tough requirements for flexibility and migration reduction.
- Food grade lubricants and cleaners for can seaming machines are often better performers than conventional products, and meet increasingly tough regulatory requirements, reported Andy Hatch from Henkel Corporation. Food safe lubricants that work were also highlighted by Greg Morris of Shell.
- In China, ORG is one of the fastest-growing canmaking companies and is planning to become the largest domestic manufacturer by 2015 with an ambitious expansion plan that now includes collaboration with Impress Holdings in Europe. Its managing director Wei Gong outlined in detail the metal packaging business in China. Sales of metal packaging in China grew by 28.4 percent to 42 billion Yen (US\$5.4bn) in 2006.
- Canmakers are increasingly becoming aware that lamination systems of the type recently launched by Germany's Billhöfer could offer appealing economic solutions for both high-quality products with high-barrier properties. Detlef Blumenstätter of Billhöfer and Hajo Hagens of Mitsubishi Polyester Film detailed the latest developments with the Novus-1200 application system and the films it uses for laminating metal sheets for fabricating cans.
- A laser marking system that is easy to program for a variety of container formats and alters the colour of containers coatings was revealed by David Coulter of DS-Chemie.
- Can sealants are increasingly being made from universal materials that meet international regulations for migration and product life, reported Teresa Ramos of La Artistica in Spain.



Canmakers love to talk canmaking: are you in the picture above?

Right: Alan Ross of Custom Machining Corporation talks end liners with potential customers

Coil-handling equipment to reach Japan

An exclusive distribution deal between a US coil-handling system specialist and a Japanese D&I canmaking equipment supplier was struck on the final morning of Cannex 2007.

ASC Machine Tools of Spokane, Washington, manufactures modular coil-handling and lubrication systems for D&I aluminium and steel cans. Its product range will now be represented in Japan by DI Engineering Company, based in Tokyo.

The deal could be further expanded in the future, including the option of DI stocking spare parts and providing servicing from its distribution and service centre in Singapore.

ASC recently manufactured a coil-handling line for Malaysian canmaker Kian Joo, due to be installed in the next month, and two more were shipped at the end of April to undisclosed locations in Asia.

Eye-catching models on the Hinterkopf booth

Hinterkopf had two of the more eye-catching displays at the Cannex 2007 show in Las Vegas this week.

The most colourful draw was a pair of models who stood atop a platform as a body-painter sprayed them spectacular designs. The attraction caught the eye of



the mostly male delegates, who seemed to frequently linger through the area, pretending to watch the company's other eye-catching new model: a loudly-operating H240 seven-colour printer.

It was one of a number of operating items of machinery to be found among the booths at Cannex.

Managing director Alexander Hinterkopf said his company will release the DW20/9 in June, the world's first nine-colour dry offset printer that features the first fully-automatic blanket washer. He also said his company has created what will be at year's end the fastest monobloc aerosol canmaking line in the world, running above 200cpm. But Hinterkopf was most excited to talk about his company's recent success in the necker market.

"We are now in the game to help create a market for the bottle can," said Hinterkopf, who said his company's neckers will be found in seven plants across Europe by the end of the year.

Hinterkopf also brought along displays of the next generation of bottle cans. But, predictably, the body-painted women were his most popular attractions. Who says cans can't be sexy? ▶

Teflon conveyor belts gaining ground in US

Skyrocketing energy prices in the US that have forced many companies to look into cost-cutting initiatives has provided a boon to US-based Advanced Flexible Composites, maker of PTFE-coated conveyor belts.

Totals were unavailable, but marketing director Mike Baker said one company

AFC works with has done 50 conversions since it entered the food processing market two years ago. The company's customers include Ball, Crown and Metal Container.

AFC recently announced a joint agreement with US-based coating specialist Whitford Worldwide to create Whitford Flexible Composites, an international venture that will service Europe and other markets with coated and laminated fabrics, belting and pressure sensi-

tive tapes produced at Whitford's facility in Runcorn, Cheshire, England. Baker said PTFE belts — already widely used in Europe — provide numerous cost advantages over steel conveyor belts, including lower purchase price, lower maintenance costs due to non-stick, easy-to-clean materials, and energy savings due to better heat transfer and less absorption of energy.

"I believe the future's big for this," said Baker, who said the majority of AFC's business has come in the US with recent uptakes in the Middle East and the Pacific Rim. "The energy savings is mainly what attracts the initial attention. But our experience has been companies saying, 'the energy savings is great, but the reduced spoilage and other efficiencies are really what save us money.'"

Inspection joins up with vision in North America

Inspection system specialist CMC-Kuhnke has joined forces with vision system experts Ibea to offer systems in North and South America.

Described as a strategic partnership by



Engineer Dave Troxler shows how a Can Man X1 welder struts its stuff, now with thinner weld wire

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21. ALCOA MODEL 591 PROFILER FOR 2PC BEVERAGE CAN WITH 1,800 CPM
22. ALCOA LT-16 LIGHT TESTER FOR 2PC BEVERAGE CAN: 1995
23. REYNOLDS SPIN FLOW NECKER: 1995



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Alex Grossjohann, vice president of CMC-Kuhnke, and Holger Lübcke, chief executive of Ibea GmbH, it will enable Ibea's products to be represented in a wider market.

"It is good for us," said Grossjohann, "because the products are complementary."

CMC-Kuhnke's most recent project launch is the MARS system for checking can seams automatically, the latest example of which has been used by Silgan at its Clover, Wisconsin, plant where cans are made for adjacent Del Monte.

Copper lube gains momentum

Chemtool and its 127L cupping lubricant, which has been shown to lower tear-off rates on beverage can lines by up to 80 percent, continues to gain momentum.

The US-based chemical company's lubricant will be added to lines at Metal Container Corporation by early May. Also the lubricant should be in use at Rocky Mountain Container plant's in Colorado, adding to a list of US customers that includes Rexam, Ball and Crown, according to chemist Bob Mack.



What's on the agenda: Is Rexam's Bill Barker talking bottles with Norm Nieder, retired from A-B but still active. Pictured right is a prototype Rexam bottle with a similar Japanese version



The company also said it has several other new projects in the works, including expanding its reach with plans to add plants in Brazil and Asia.

A Chemtool washer chemical is scheduled to be released within the next two months.

And there's a major R&D effort continuing at Chemtool with what Mack calls a

radically-different inside spray and coating that should bring great benefit to the two-piece can industry.

"We're hoping to continue to gain traction and become a major supplier to the industry," Mack said. "The goal is that someday somebody will say, 'We're glad Chemtool got into the canmaking business.'"

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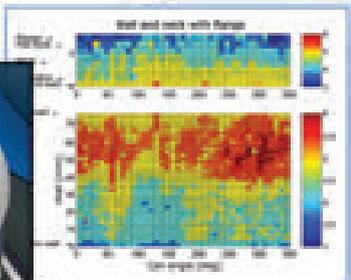
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Above: Top brass from Poland's leading canmaker Can-Pack get the technical low down. Above right: Peter Moran



"Now, more and more people want retortable peel-off products, particularly for fish," said Guyer, who added that recent peel-off end making machine shipments also have gone to Thailand and South Africa. "It started in Spain, where Mivisa has taken the lead and is doing mainly fish products but also asparagus. To this point, North America has not been as aggressive in this area."

Soudronic continues to work on further developing peel-off lids with laminated foils that combine a thin layer of aluminium with plastics. Soudronic has been working the past three years with Swiss-based Kleiner, and currently Compeel laminated peel-off lids are being used on cans in Italy and Israel.

"It's a nice message that we try to join two excellent materials," Guyer said. "It's the best of two worlds. The plastics brings convenience to the customer, who can easily open the can, it brings cost savings to the canmaker, the lid is nicely printed, and the can as a package has all the benefits such as excellent mechanical resistance for high-speed processing, stable transport and stacking, and last but not least a long lifetime."

Cannex debut for China's Zhejiang Hengli

China's scroll sheeting systems supplier Zhejiang Hengli Shearing Machinery Co was exhibiting for the first time at Cannex.

The company has more than 80 percent of the Chinese market and since 2005 is exporting to countries such as Indonesia, India, Saudi Arabia and Ukraine. It claims to have sold more than 180 lines in the last six years.

Speaking at Cannex, Kwan Chi Ling said: "We have had serious enquiries from Mexico, Portugal and the US." 

Next month's second Cannex report will include Nordson, NDH Technical Services, Total Process Control, Golden Aluminum and Shell Lubricants.

Magnetic end liner offers quick size changes

A compound-lining machine for steel ends, first revealed in *The Canmaker* (March, 2007) was launched by Custom Machining Corporation.

The Magnetic Rotary End Liner 500 (MREL500) uses a magnetic centre wheel, which grips and rotates the ends as it spins. One of the key benefits is the speed with which the end size can be changed; while this takes around a day on a standard system, CMC's unit requires just the rail and pushers to be changed and takes around two hours, says sales manager Ed Bendell.

The MREL500 is also claimed to offer application speeds 20 percent higher than alternative systems, and is compatible with all sizes from 38mm-diameter closures to size 603 food ends.

Trials and developments were made at Silgan Closures' plant in Evansville, Indiana. The first MREL500 has now been in production for around five months.

Retortable peel-off ends arrive in North America

A Canadian producer of fish cans is the first North American customer for Soudronic's Uniseal system for making peelable foil easy-open ends.

Speaking at Cannex 2007, Soudronic's chief executive Jakob Guyer said he didn't want to reveal the name of the customer, but said the machine has two lanes running at a combined 400 ends per minute.