BUSINESS LEADS AT CANNEX

The volcanic ash cloud flight disruption in April failed to deter the visitors at this year's Cannex. Richard Estrada, Mónica Higuera and John Nutting report

As this year's canmaking convention opened in Las Vegas, exhibitors were encouraged by news of increasing investment in a number of new can plants in Africa, the Middle East, Asia and South America.

Canmakers from across the world made it to Cannex to source machinery for their expanded operations, with exhibitors finding new leads in both mature and emerging markets.

"We've had a great show," said Applied Vision's president Amir Novini, whose company supplies machine vision systems. "All the top corporate guys were here," he said, referring to beverage canmakers.

Dr Bernd Ullman, business development manager at Germany's Mall+Herlan, which manufactures production lines for aluminium aerosol cans and bottles, summed up the event: "We had a good show with a lot of visitors. All our meetings have been very professional and we are keen to see how things will move on."

President of used and refurbished equipment supplier Container Fabrication Machinery, Gary Alexander was upbeat too. "Great show. Equipment sold," he said; while Seref Basaran, vice president of Basaran Grinders, was already very satisfied with the business he had done half way through the exhibition.

Canmakers found the meetings encouraging too.

Crown's beverage can chief in North America Jerry Gifford brought a contingent while Impress's research chief in Europe Philippe Gimenez was at Cannex prior to the company starting production at its new food end factory at Conklin in New York State. Visiting *The Canmaker's* booth, Gimenez also confirmed the company's plans for expansion in D&I food capacity in Europe.

Croatian canmaker and metal decorator MGK-Pack and its closures-making subsidiary Pluto had a productive show. "We have had plenty fruitful meetings with equipment producers which we consider to buy in nearby future," chairman of the board Kristian Krpan said.

Akbar Kalla, chairman of South African general line canmaker AmoPack, which is adding a paint canmaking line, printing capacity and upgrading other machinery at its Pretoria plant, said: "We are in a busy growing phase. Cannex makes it easier for us – It's good to build up a network."

AmoPack's plant features six canmaking lines for paint and polish with plans to expand into aerosol cans and eventually food cans, he said.

US vegetable canner Indel Food Products was looking for equipment for a canmaking line for its Mexican plant. The El Paso, Texas-based company currently

King of the cans: Steve Swartz and Donald Gust from Silgan Containers (left) discuss quality control systems with Applied Vision's Joe Nicholson and Kevin Johnsen

Lighter three-piece canmaking systems: Germann+Frei's Gunter Rochler and Heiner Germann


Digital printing on drinks cans: INX International's Jack Knight is excited about it

makes ten million cans in 603 (153mm) diameter for tomato and peppers, and next year plans to commission a second line for 401 (99mm) cans.

Malaysian food canmaker Power Packaging was searching for the equipment for its second line. The company began operations in 2009 with one line for making condensed milk cans, managing director Cindy Chan said, who previously spent 13 years at General Packaging.

Colombian tuna canner Seatech, which processes around 11,000 tonnes of tinplate a year for its own cans, began production of easy-open ends in December last year for its leading brand Van Camp's.

Egyptian aerosol canmaker and filler Can Co started making vegetable food cans earlier this year and was at Cannex to source equipment.

Turkish aerosol filler Lider Kozmetik was also looking to expand its canmaking operations; while Brazilian paint company Maxvinil is considering to make its own cans, said director Emilio Sanches.

Brazil's leading three-piece canmaker Brasilata never misses a Cannex and was sourcing machinery for its fourth canmaking plant in the country, to be based in the north-eastern state of Recife, and that will feature two lines to make 3.6- and 18-litre general line cans for customers such as AkzoNobel and BASF.

Also looking for equipment was aerosol canmaker Alentuy from Venezuela, which is planning its first operation in the US to open mid-next year at Jonesboro, Arkansas, to make aluminium aerosol cans and bottles.

Growth markets fuel beverage can capacity expansion

In the beverage can sector, exhibitors at Cannex were either preparing to quote for projects or were already manufacturing process equipment for delivery.

In Europe, Crown is expected to announce a second beverage can line for installation in Slovakia, where its plant for supplying east European customers has just started production.

In North Africa, Morocco Beverage Can Co has ordered a new plant that will be engineered by Roeslein & Associates, which is completing a plant for GZ Industries in Nigeria with production expected to start this month. A second plant is also being planned in Nigeria to supply cans to beer and soft drinks manufacturers, but the company has not been revealed yet.

Poland's Can-Pack, which in December started production at its latest plant near Moscow in Russia, is said to be considering four beverage can facilities in China to meet growing domestic demand.

Taiwan's Great China Metal will be building its next beverage can plant at Jinan in Shandong province. It has acquired the two D&I lines from Rexam's Oklahoma City plant that was closed last year.

A plan for Japan's Toyo Seikan to support a joint-venture project in Iran for making polyester-coated TULC beverage cans is on the stocks, it was said at Cannex. It would be the Japanese manufacturer's first project outside Asia.

Mahmood Saeed in Saudi Arabia will soon be using CDL ends for its drinks cans

Premium beverage cans from a hybrid D&I line

The premium beverage can niche is still an opportunity waiting to be properly exploited thinks Dr Bernd Ullman of Mall + Herlan.

At Cannex, business development manager Ullman, formerly with canmaker Ball Corporation, was promoting the Hi-Flex 200 concept, a manufacturing system using a conventional aluminium aerosol back end fed by a cupper and D&I bodymaker.

"Now we're trying to bring the flexibility of the aerosol can world to the high-efficiency beverage can world," said Ullman. "We want to take a commodity product and turn it into a premium product."

While the flexibility will be provided by necking and shaping systems of the type used by Rexam at its bottle line in the Czech Republic, the efficiency will come from a novel front end using a single or double-die cupper zig-zag fed with wide coil to provide metal efficiencies. The line would represent an investment of $10.5 million, said Ullman, and with a production speed of 200cpm the yearly capacity would be between 70m and 80m cans.

Baosteel to make aluminium beverage cans

Wuhan in China is becoming a two-piece beverage can manufacturing centre with Baosteel planning to set up a plant near the city where a number of herbal tea canning lines have already been located.

But unlike Baosteel's four other beverage can plants, this will be the tinplate company's first aluminium can line.

The plant is being engineered by Colorado based Evergreen Technology, which is in the process of building CPMC's second beverage can plant, also at Wuhan.

Mark Jones, managing director of Evergreen, said the Baosteel line is being brought from Taiwan. "It is one of the two lines from the Corner Corporation plant that was closed. The line will be upgraded to increase its line speed from 1,000 to 1,600cpm."

The other Corner Corporation line was shipped to Vietnam where it is part of the Dong Nai plant in which Crown Holdings has a 70 percent share. ▶

Ten-station end liner launched in the US

Custom Machining Corporation was at Cannex to introduce its new ten-station end liner to the US market. The new generation of the rotary end liner can process up to 2,500 ends per minute, said CMC's sales manager Ed Bendell.

"European canmakers are on the cutting edge and are looking to improve production while trimming costs," Bendell said. "They began asking about higher speeds and that got us to thinking about a ten-station liner. There's a market for it in the US, and Cannex is an opportunity to get it in front of people."

The six- and eight-station units have a capacity of about 1,500 and 2,000 ends per minute, respectively, so the new model can increase speeds by 25 percent. It is designed for ends sized up to 209, and to slide into an existing machine.

The original ten-station prototype was too large to fit an existing machine, so CMC technicians whittled down the size of some components to make it compatible.

"Our sales pitch is that you can quickly and conveniently increase speeds without buying a new machine or disrupting your production," says Bendell, who has been with the Colorado company since it was created in 2003. "A lot of us here used to work for Preferred Machining, so with our experience, we're experts when it comes to compound lining."

A customer with an eight-end station need only replace the upper turret casting and lower spindle hub and then buy the two additional stations. The casting and hub need to be replaced so they accommodate the hoses feeding them.

"One issue where we held our ground, as designers, was that it needed to fit an existing machine. We didn't want a customer having to buy a new machine just to get this upgrade," Bendell said. "The people who develop our rotary end liners are the ones who service them, so it's built in a very sensible way.

"If the ten-station liner is going to be serviced or inspected, it's easy to get at the main parts. Efficiency means more than just producing more ends in less time, it also means making it efficient for service personnel – reducing their work time."

LPT's winning combination (l-to-r): Hans-Peter Kaempfer, Dwain Gaalema and Mike Simonson

Winning combination solutions in hard materials

US tooling manufacturer LPT, part of Germany's Wallram Group, used Cannex to promote its expansion into high precision tungsten carbide tooling.

Known for its distinctive yellow ceramic die necking tools, LPT has relocated this year to a new 21,500 sq ft facility at Colorado Springs, Colorado, which features a dedicated carbide punch sleeve line.

The Wallram Group acquired Lieb Precision Tool (LPT) in 2008, when Hans-Peter Kaempfer became the sole owner, president and chief executive.

At Cannex he was keen to stress his company's strength, derived not just from the combination of hard tooling materials, but that of personnel.

Mike Simonson, who was with LPT since day one as process engineer is LPT's plant manager responsible for manufacturing.

Dwain Gaalema joined LPT in 2009 as technical sales manager. His career spans more than 25 years at Metal Container, Ball Corporation and Roeslein & Associates, and provides an engineering support, says Kaempfer, "we couldn't offer before".

Kaempfer's expertise meanwhile lies on carbide tool manufacturing.

With facilities in the US, Germany and Poland, the Wallram Group produces ceramic and carbide tooling for cuppers, bodymakers, decorators and neckers.

Wallram applied for the first patent for the production of tungsten and molybdenum carbide in 1914.

Croatian canmakers (l-to-r): Ante Andric (Pluto), Pende Antun (MGK-Pack), Petric Tomisav (Pluto's president), Miodrag Glusac (MGK-Pack) and Kristian Krpan (MGK-Pack's chairman)

Gustavo Deandar, of Mexico's Indel Food Products, was after equipment for a second line

Egypt's aerosol canmaker Can Co has begun production of food cans, said Omar El-Mokadem

LPT pioneered yellow-coloured ceramic tooling which allows laser-engraved identification marks to be viewed more clearly.

Lightweight drinks can ends debut in Middle East

Container Developments Ltd, which was exhibiting at Cannex, shipped two complete shell and conversion systems for manufacturing lighter-weight beverage ends that involve novel process-control technology.

Soft drinks producer Mahmood Saeed in Jeddah, Saudi Arabia, has ordered the multi-million dollar CDL+ system after the design's success with canmaker Ball Corporation in the US and Europe.

"Ball has made around 40 billion CDL ends so far," said Pete Stodd, chief executive of Ohio-based Container Developments.

The CDL+ design enables the high-speed production of 200 diameter ends in an aluminium alloy gauge of 0.008 inches that hold a pressure of 112psi, which is necessary when the canned drinks are passed through a pasteuriser.

"With 200 ends normally using a gauge of 0.009 inches that means a saving of between 12 and 14 percent," said CDL's Jim Wilkins. "There is also a large-opening version of the end available." ▶

The shell presses are an updated BSTA1250 design from Bruderer that instead of using temperature-control systems to ensure that the shell profile is correct to within two tenths of a thousandth of an inch, an analogue position monitoring device notes the bottom-dead-centre of the press and adjusts it mechanically through a feedback system, said technical sales engineer Scott Randall.

The presses produce shells in 24-out tooling at up to 450 strokes per minute giving an output of 10,800 per minute.

The Bruderer system can also be used for converting ends. The conversion presses at Mahmood Saeed are supplied by Minster.

Mechanical expanders for smooth bodies

Shaping and expanding processes for three-piece cans have been around for many years, but the one shown at Cannex by Germann + Frei is novel in that it is mechanical but does not leave any tooling marks on the container, which is smooth like those produced by the pneumatic systems employed by canmakers such as Crown.

G+M's sales chief Gunter Rochler showed aerosol can bodies that were expanded at up to 15 percent, enabling lightweighting. "We have been working on this with various companies for more than two years," he said, "and we are still developing it. The customer needs to find the best solution for tinplate and the weld quality."

Rochler was cautious about describing the machine, only revealing that it had two rotary turrets and runs at 600cpm. The first six-pocket turret pre-expands the can body while the ten-pocket second turret completes the expansion or shaping process.

G+M was also showing lightweight techniques that were now available for larger three-piece cans using in the food catering business. These can now be specified with beading and necked in bases, allowing lighter gauges and smaller diameter ends.

Drinks can labels on demand: The Canmaker's Tanya Lewis, John Nutting and Pri Kapadia star on the INX Evolve system

Digital printers make their debut at Cannex

Digital printing systems were a strong attraction at Cannex with INX International Inks selling two of its Evolve systems just before the show, one of which was being demonstrated on its booth.

Brazilian paint company Maxvinil sent directors Emilio Sanches, Joaquim Curvo and Joaquim Curvo Neto

The newly-developed machines, which print directly onto beverage can bodies at the touch of a button, will be used by a new company set up in Washington state to make premium-end aluminium bottles.

US-based INX International, whose speciality is metal decorating inks used in a wide range of industries, has developed both the beverage can system and flat-based digital printing systems for proofing and short production runs, along with the special inks that are necessary for use with the ink-jet printing heads.

A novelty at Cannex was provided by INX staff taking photographs of delegates on a camera with a Bluetooth connection to the Evolve printer. Within seconds, beverage can bodies were printed with the images.

US tooling for BRIC countries

Oberg Industries' director of sales Mark Paolillo believes Cannex could be a launching pad for going abroad with the company' primary and secondary scroll dies, as well as its tooling.

"We have good coverage in the US, but we're looking for more international exposure," said Paolillo, whose Pennsylvania-based company has extensive experience with grinding and machining tool steels, carbide and ceramics. "Brazil, Asia and the Middle East, those are three hot areas. The beverage can and end business has been a big push because of the higher volumes."

Metal packaging provides ten percent of Oberg's $100 million in annual sales, and 40 percent of the packaging revenue is from international customers. Paolillo believes the company's diversity benefits the industry.

"Parts manufacturing is 50 percent of our business, and the medical field is the largest part of that," he said. "Technology carries across product lines, though. There are improvements we make in medical parts, for example, that we also use to improve the tooling that we're selling to canmakers. One of our strengths is we find solutions by casting a wider net."

BPA-free membrane ends: Amcor Flexibles' Christoph Dietrich

Canmaking technology used for cable spools

Canmaking technology reaches into the least expected sectors of business. Bill Ito went to Cannex from Canada in company with Titan Steel's James Hartley because his company, Spoolon Manufacturing, makes spools for the wire and cable industry.

He uses a range of materials including wood and cardboard, but most of the centre cores are cylinders similar to tinplate can bodies using a lock seam. Which is why Ito was in Las Vegas looking for better ways to make the spools.

Making a name in tooling and engineering

Beverage can manufacturers in Europe might find the company name T+G Engineering familiar, recalling the UK-based tooling supplier TG Can that was wound up last year.

And indeed there were similarities, in that both provided sophisticated machin-

On the road with Gary

Gary Alexander, who runs the asset management and equipment provider Container Fabrication Machinery, has a novel approach to building relationships with his customers: he takes them on motorcycle rides.

An avid fan of Harley-Davidsons, Alexander provides a selection from his collection and you ride the machine with him in a group to a lunch stop and back. Of course it helps to have motorcycle riding experience, many canmakers confess to ownership once pressed.

For Cannex, Alexander rode with a colleague the 400 miles south to Las Vegas from his headquarters in Stockton, California, with five other bikes following in a truck.

The Sunday before the show opened, I joined Alexander's team in company with canmaker Jim Hundt, Crown's manager of production engineering in Canada, and we rode the 35 miles to the Hoover Dam on the Colorado river.

Even for a seasoned rider, the American motorcycle culture shock is overwhelming. For Hundt, being accustomed to Kawasaki sports bikes and having never ridden a Harley, it was a rite of

passage. But the grin on his face after he stepped off the orange custom Dyna-Glide said it all.

The other Harleys were all variations on a touring theme with wind-deflecting fairings and luggage cases, the so-called 'bagger' style. That meant our clothing could also be stylish rather than practical so jeans, tee-shirts and leather waistcoats, along with reversed baseball caps or bandanas under our pudding basin helmets were *de rigueur*.

All the Harleys were special in their own way. The one I rode was more impressive than any Harley I'd ever tackled since I first rode a Sportster 35 years ago. "It's an 07 Screaming Eagle Ultra Classic with a 131 cubic inch engine that makes 130 brake horsepower and 134 foot pounds of torque," said Alexander before we set off. What he meant was that the 700 pound snarling monster could accelerate with just a flick of the wrist quicker than most vehicles on the road.

Returning from the Hoover Dam we stopped at a casino for a beer (Alexander says he doesn't gamble these days). Hundt explained that he sells machinery to, as well as sourcing equipment from, Container Fabrication Machinery. It sounds like a good relationship, one that was likely better for the riding experience.

Other canmakers who joined Alexander on another ride included Silverio Candido da Cunha from Brasilata in São Paulo, Brazil; Daniel Sánchez from Seatech at Cartagena in Colombia; and Ron Schlemmer and Don Wharton, both from Standard Engineering, Canton, Ohio.

Thanks also to CFM's Tim, Bruce and Brian, and attorney Dan, who was caught by a Highway Patrolman but somehow talked his way out of a speeding ticket.

ing services with customers in the automotive, Formula 1 racing and canmaking industries.

Tony Smyth, director of T+G Engineering, wants to distance his company from the past and re-establish the West Byfleet, Surrey, firm as the pre-eminent canmaking and canning tooling business in Europe and North America.

With design services, specialist consultants and an international supply base, T+G Engineering makes two- and three-piece canmaking tooling, chucks and rolls for seamers and aerosol can tooling.

South Africa's AmoPack is in a "busy growing phase", said chairman Akbar Kalla

Colombia's tuna canner Seatech now makes easy-open ends, said Daniel Sánchez

Easy-open aluminium membranes go BPA-free

Following calls from milk powder and nutritional food manufacturers, Amcor Flexibles has launched aluminium membrane easy-open ends that are BPA- and melamine-free.

The Singen, Germany-based company, which was acquired as part of the Alcan packaging business earlier this year, has been working on the Alufix ends since May 2009, said product development manager Christoph Dietrich.

"We are very proud that we are now able to supply a 100 percent BPA and melamine free peel-off end membrane, which fulfils the recent recommendation of the Food and Drug Administration regarding baby food can linings," said Dietrich.

"This innovation combined with Alufix's outstanding barrier properties and the elimination of sharp edges and metal splinters makes cans a safe and reliable packaging solution."

Dietrich did not reveal which coatings manufacturer Amcor had been working with. "The Alufix ends have always had epoxy-free inside coatings but the external was an epoxy melamine resin," he said. "Now both sides are epoxy and melamine free."

The new lacquer system will be applied on the Alufix Dry and Alufix Dry PRO membrane foils and is already commercial.

Venezuela's Alentuy is planning a plant in Arkansas, said president Antonio Nagen

Premium drinks aluminium bottles at $18 a hit

Newcomer at Cannex was Tim Andis, who is investing in a production line for manufacturing aluminium bottles of the type used by backpackers.

Andis, who sells and distributes mountaineering and backpacking equipment, what he calls "toys for playing in the outdoors", had been trying to import bottles from Europe because there was no manufacturer in North America.

"REI [the outdoor pursuit retail chain] had come to me for a domestic supplier. I looked for a year for somebody to outsource the bottle but couldn't find anybody," he said. "So I thought we'd make them ourselves."

He's hired Evergreen Technologies in Colorado to build the Liberty Bottleworks line at Yakima in Washington state. But although it's a D&I line it's like nothing we're accustomed to in the canmaking world. It will be running at around 20 bottles a minute using technology from Emec, based in Marysville, Ohio, which usually makes machines for manufacturing fire extinguishers. Andis only needs up to two million bottles a year, and they will be premium products selling for between $16 and $18.

Making the bottles extra special will be digitally-printed images using INX International's Evolve system, which Andis bought off the INX booth at Cannex.

NEXT MONTH

More highlights of what was on show at Cannex in next month's issue, when we'll be covering Bibra, Can Man, Cevolani, Codi, Grace, Henkel, Mercier Tool & Die, Nordson, Soudronic and more.