

OCTOBER 2011

Includes: Used equipment Marketing Seaming

Asia CanTech preview



ENGINEERS · MANUFACTURERS · CONSTRUCTORS

v30

v24

v18

v15

START YOUR ENGINE ...

Introducing the V-Series by Roeslein; the highest-performance can manufacturing system in the industry.

The V-Series deploys **faster** than any other system on the market, generating the **quickest** return on your invested capital.

The V-Series is a unitized, preassembled, and tested solution, reducing the on-site installation and *start up* time.

The V-Series is a scalable solution providing the most cost efficient approach to *increasing* your manufacturing output

The V-Series by Roeslein ... Turbocharge your bottom line.

GLOBAL PROJECT EXECUTION



Bigger and better

This year's Asia CanTech conference promises to be the biggest and best yet. The annual conference and meeting point for can makers and fillers in the Asia Pacific region is now in its fifth year. This is the first time that the event has been held in Vietnam, which is an upcoming market in the can making world. All supplier packages sold out well in advance of the show, which has a truly international feel.

Once again we have a strong programme of keynote speakers. Three of the world's biggest can makers are all represented within the lineup. It includes Gihan Atapattu, who is the president of Ball Asia Pacific; Mark Davies, business interface manager Asia Pacific for Crown Packaging; and Robert Zanetto, business development director Metal-Asia for Ardagh Group. I'm sure they will all give an interesting oversight of the marketplace and I'd like to take this opportunity to thank them all for agreeing to speak at the event. For a full preview see page 14.

I'd also like to say a big thank you to editorial board member Geoff Courtney. Geoff has been instrumental in securing the services of another regular contributor to CanTech International.

Stephen Clarke, who is the customer technical service

(CTS) manager for Western Europe, at Ball Packaging Europe will share his knowledge of can and end making, can filling, can handling, double seaming and fault-finding. This new series of articles will run in every other issue over the next year. Along with Jack Knight, who is our regular ink specialist, there is now a variety of technical information available at readers' fingertips. You can read Stephen's first contribution on page 18.

We also take a look at the areas of used and refurbished equipment and seaming on pages 24 and 34 respectively.

Some of you will probably be reading this during your stay in Ho Chi Minh City. Please be sure to come and say hello to myself and the rest of the *CanTech International* team.

Alec Peachey, Editor, CanTech International



Search for CanTech International magazine

Editorial Advisory Board



Sue Rogers Director of the British Aerosol Manufacturers' Association (BAMA)



Simon Jennings Owner and advisor of Nomis Consultancy



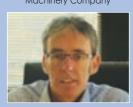
Atit Bhatia Senior Vice President at Hindustan Tin Works



Adrian Long Sales Manager for CMB Engineering



Robert Gary Senior Vice President of Sales and Marketing for Stolle Machinery Company



Geoff Courtney Chairman of the Can Makers



James Peterson Vice President of Marketing and Corporate Affairs at Ball Corporation



Editorial Director Sarah McRitchie sarah@bellpublishing.com

Editor Alec Peachey alec@bellpublishing.com

Art Editor Sue Burke prepress@bellpublishing.com

Advertisement Manager Victoria Deakins victoria@bellpublishing.com Accounts Sally Capon accounts@bellpublishing.com

Publisher Neil McRitchie neil@bellpublishing.com

Editorial & Sales Office The Maltings, 57 Bath Street, Gravesend Kent DA11 0DF, UK Tel: +44 1474 532 202 Fax: +44 1474 532 203 Taiwan Sales Agent Worldwide Services Co Ltd PO Box 44-100 Taichung Taiwan Tel: +886 4 2325 1784 Fax: +886 4 2325 2967 worldwid@tcts.seed.net.tw

Japan Sales Agent Yukari Media Incorporated. YMI bldg. 3-3-4, Uchihirano-machi, Chuo-ku, Osaka 540-0037 Japan Tel: +81-6-4790-2222



ZIG ZAG SHEET FEED SEMI AUTOMATIC



ZIG ZAG SHEET FEED FULL AUTOMATIC



STRAIGHT SHEET FEED FOR GANG DIES



SHEET FEED PRESSES WIDE RANGE: XS-XXL



COMPLETE DRD LINES

DIES 1-out - 16-out ENDS + SHELLS 100 - 3800 epm TO-PT-PP CAP LINES 100 - 2000 cpm (PVC free) DRD LINES 100 - 600 cpm EASY OPEN END LINES 600 - 1800 epm





COMPLETE EZO LINES QUICK CHANGE



COMPLETE CAP LINES (PVC FREE)

ALFONS HAAR MASCHINENBAU GMBH&COKG+Postfach 530160 • D-22531 Hamburg • TEL(49)4083391-0 • FAX(49)40844910 • E-MAIL office@alfons-haar.de ALFONS HAAR SINGAPORE • 11C Jalan Arif • Singapore 548814 • TEL (65) 6315 0668 • FAX (65) 6399 2646 • E-MAIL andy@alfons-haar.per.sg ALFONS HAAR INC • 150 Advanced Drive • Springboro, OH 45066 U.S.A • TEL (+1)937 5602031 • FAX (+1)937 5602032 • E-MAIL sales@alfons-haar.us

October 2011 Contents



October 2011 Volume 19, Number 2



Cover photo courtesy of Rexam Beverage Can Americas.

Subscription Information

DON'T MISS IT! An annual subscription to CanTech International includes direct personal delivery of 10 issues per year, weekly email newsletter and password access to Bell Publishing's online archive of news and articles covering the metal packaging market.

Postal & Digital Issue One Year: £153 GBP €199 Euro \$277 USD Postal & Digital Issue Two Years: £265 GBP €351 Euro \$480 USD Digital Issue Only (1 year): £145 GBP €189 Euro \$263 USD

To subscribe please email subscriptions@bellpublishing.com or go to www.cantechonline.com and click Subscribe.

Send address changes to: CanTech International,

The Maltings, 57 Bath Street, Gravesend, Kent DA11 ODF, UK. Published by Bell Publishing Ltd. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior written permission of Bell Publishing Ltd.

Printed in the UK by Williams Press, Maidenhead, Berkshire. ISSN: 1466-7851



Contents

aplo ov

STATE BRAN

REGULARS

- 3 Comment
- 7 World News
- 40 Equipment News The latest machinery and equipment for the can line
- 41 New Products New cans and ends in the market place
- 58 Candid Patrick Geffers, sales manager graphics, Stork Prints Austria

FEATURES

- 14 Asia CanTech 2011 preview Asia CanTech will take place in Vietnam for the first time ever this year
- 18 Clarke's can corner!! Stephen Clarke is the customer technical service (CTS) manager for Western Europe at Ball Packaging Europe. He will share his knowledge of the industry in every other issue of CanTech International
- 21 A master of trades CanTech International correspondent Evert van de Weg speaks to Rolf Geide, general manager of Cantec, and Robert Bauerdiek, commercial director, about the company's can making machinery and new developments

25 A one stop shop

The two largest used can making machinery dealers have joined forces. US based Container Fabrication Machinery and MEM Holland spoke to CanTech International about the agreement

ntol

- 28 Decorative designs Turkey's steel can manufacturing industry has undergone a shake up in the past two years with several companies deciding to close down production due to low prices and overcapacity in the market. David Hayes reports on a company that is bucking this trend
- 30 Knight's knowledge Jack Knight is director international technical service for INX International Ink Co. In his latest contribution for CanTech International he looks at the area of graphics

32 Marketing matters This article explores the world of iconic beverage can design and marketing, focusing on artwork and packaging innovation, the motivations behind them and a look at what the future

34 Seaming techniques Ole Ørts Pedersen is a senior consultant at Danish can maker Glud & Marstrand. In this article, he covers the basics of double seaming and closing machines

holds for cans

- 37 Seaming seafoods cans The area of seaming is one of the most important steps in the can making process. In this article Alejandro Martinez from MCG updates Alec Peachey on some of the latest developments
- 42 Buyers Guide

Distinctive Shapes for the World's Leading Brands

New Shaped Bottle and Can Container Solutions from Belvac

Belvac now provides a complete solution for all your shaped bottle and can manufacturing needs. From distinctive container concepts to manufacturing cell and container commissioning, rely on Belvac's thirty years of high speed die necking experience to drive the success of your new product venture.

High speed, high volume, cost effective shaped container solutions are the hallmark of Belvac's

machinery, manufacturing, and service solutions.

- Cost Effective Differentiated Bottle and Can Containers.
- Aluminum or Steel for Beverage, Food, or Aerosol Containers.
- High Speed, High Volume, Lower Material Usage Solutions.
- Complete Support from Container Design through Manufacturing Start Up
- Wide Range of Height and Diameter



Belvac is a true strategic partner in all your efforts to build unique container solutions to grow and differentiate brand products. To speak with a Belvac representative about branded container opportunities call 800-4Belvac Ext. 6388, or by email: ShapingSolutions@Belvac.com



Belvac Production Machinery, Inc.

Belvac USA Tel: 434.239.0358 Fax: 434.239.1964 info@belvac.com Belvac UK Tel: 44.1293.618600 Fax: 44.1293.618606 sales@belvaceurope.co.uk Belvac CZ Tel: +420.378.011.322 Fax: +420.378.011.325 sales@belvaceurope.co.uk Belvac China - Shanghai Office Tel: +86.21.6081.2715 Fax: +86.21.6163.3598 info@belvac.com

News and views from the metal packaging industry

Second filler to use wine-in-can technology



French filler Cacolac has signed a contract with Australian company Barokes licensing them to fill wine in a can using Vinsafe technology.

The Vinsafe process is the only wine-in-a-can packaging system, combining long shelf life with high

product quality and managed by global patents.

Cacolac is the second European filling facility to be awarded this license after the Spanish company Font Salem. Ball Packaging Europe, one of the leading European beverage can manufacturers, is the only European supplier of Vinsafe cans for wine using Barokes' technology.

The Vinsafe technology utilises three distinct elements, namely wine parameters, can specifications and filling conditions. It is the only alobally recoanised, patented wine-in-a-can packaging system that has been proven to deliver consistent quality, stability and longevity in canned wine. In the past years, Vinsafe wines have been awarded over 125 wine competition medals

Ball signed the contract to manufacture and supply the specially produced cans for wine using the Vinsafe production process in December 2010. As an approved supplier, Ball will produce the aluminium cans with the Vinsafe logo to demonstrate that both can and content comply with the specially patented standards. With the two recently licensed Vinsafe fillers located in the major wine regions of Valencia (Spain) and Bordeaux (France), the European supply chain for Vinsafe is now established, offering European wineries a proven alternative packaging system for their wines and thus opening up new markets.

Cacolac director, Christian Maviel, says: "We are surrounded by premium wine producers looking to access new international markets and consumers with their wines and after much investigation we decided that the only viable option is Vinsafe."

"Wine in a can is convenient and trendy," explains Gerlof Toenhake, director marketing at Ball Packaging Europe. "Cans are unbreakable, lightweight and compact, making them ideal for outdoor and on-the-go consumption like on a picnic or at a music festival."

Cacolac is based in Léognan, just south of Bordeaux, within one of France's premium wine-growing regions.

Multipack sales help drive shipment growth

Can Makers, the body representing the UK manufacturers of beer and carbonated soft drinks cans, has revealed that carbonated soft drink can shipments were up 8%, with 186 million more units shipped in the first half of 2011 compared with 2010. In total, 2503 million cans for soft drinks were shipped in the first six months of the year (January to June).

According to Nielsen, growth in all carbonated soft drink in cans to end of June was 11.2%. The 15, 25 and 33cl can sizes have all seen a rise. The main driver has been an increase in sales of multipacks, with eight packs proving the most popular. The energy drinks sector has had remarkable growth, with 50cl cans in this category seeing 31% growth year to date.

While carbonated soft drinks continue to grow, shipments of empty beer and cider cans in the first half of 2011 were down by 6.8% compared with 2010, with 2108 million cans shipped.

Empac gains new members

European Metal Packaging (Empac), the association which brings together European producers of rigid metal packaging and their supply chain partners, has announced the addition of two new associate members.

KBA-MetalPrint and Sidermec/ Indumet will both support Empac in its mission to defend and promote the rigid metal packaging industry in Europe by conveying its many unique advantages.

The two new members take the number of associates up to six, as a growing number of companies recognise the importance of the Empac mission.

This year Empac hosted the Metal Packaging Forum at the leading packaging trade show, Interpack in Düsseldorf. Members were featured at the stand through the product innovation gallery which highlighted the strengths of metal packaging, centreing around its permanency underpinned by the material to material loop and its leading

statistics in recycling.

"We are particularly pleased to welcome KBA-MetalPrint and Sidermec/Indumet to our organisation. This represents another important step as we continue to partner with strong players from the metal packaging sector and speak in a unified voice for our industry to raise awareness on the overall strengths of our products," says Gordon Shade, CEO of Empac.

Located in Stuttgart, Germany, KBA-MetalPrint is the worldwide leading supplier of multicolour metal print and coating lines, as well as drying and air purification systems. "We are pleased to join Empac, a forward looking organisation which is actively promoting the advantages of metal packaging. We are eager to participate in current and future initiatives to ensure our business remains competitive and sustainable," says Jens Junker, CEO of KBAMetalPrint.

Sidermec, based in Italy, and its sister company Indumet, based in Belgium, are service centres



for the purchase and processing of tinplate, tin-free steel and black plate for over 30 years. The group's production plants cover over 10,000 square metres in Italy and 7,000 square metres in Belgium and process monthly an average of 12,000 tons, between material sold and material processed for third parties.

Alessandro Buda, Sidermec managing director, said: "Joining Empac is a must for us in order to demonstrate our ongoing commitment to the sector. As our aim is to provide the best possible customer service throughout Europe, it is essential we give our support to the association."

World News

AUTOMATIC VERTICAL TYPE

SPIN-FLANGING BEADING MACHINE

CAN MAKING

MACHINERY

Custom Canmaking Solutions

AUTOMATIC VERTICAL CAN

BODY PARTING MACHINE

AUTOMATIC VERTICAL TYPE TRIPLE

NECKING SPIN-FLANGING MACHINE

Ruey-lo

No. 173, Sec. 1, Kong Pu Road,

Tel: +886-4-2639-7261~2

Fax: +886-4-2639-7263

E-mail: rueyi@ms42.hinet.net

http://www.rueyi.com.tw

Brasilata launches steel pail for plaster

To achieve a competitive

container the thickness was

dramatically reduced. While the

normal steel pail uses tinplate .34

mm thick, the Lean Pail is made

using .22mm, enabling a reduc-

tion of 35% in the weight of the

container. Owed to this reduc-

tion, the Lean Pail container is

competitively priced.

It obviously does

not have the

same resistance as the

normal pail and

for

Construsul 2011.

Can making company Brasilata has launched a recyclable steel pail which can be used as a container for plaster.

According to Brasilata, a good portion of the plaster market has been looking for lower cost packaging alternatives, especially to meet the lower income market needs.

Despite its fragile appearance the cardboard barrel retains a significant portion of the market. The fact that the full container is assured of holding up in part due to the product itself since it is dense and stands up helps toward this good performance.

Brasilata after observing this property, decided

to develop a steel barrel and after two years of exhaustive research and testing came up with a new container that is called Lean Pail which was recently introduced during a Brazilian construction fair,

this reason a different name (Lean Pail) has been adopted to prevent direct comparison between them.

Brasilata w careful to distinguish this difference by using red printing on the special lid, where the more fragile nature of the container is stressed and care and handling instructions to be followed during transportation and storage. The Lean Pail lid red printed display contains instructions as well, for production operators, store owners and end users

In addition to being completely moisture resistant and able to prevent water and humidity damage in warehouses and at construction sites, the Lean Pail also has a highly prized look owed to the printing on the steel sheet. To offset the reduced thickness and increase resistance to falls beads were introduced in the lower part of the container.

Since this is a rigid container, the Lean Pail does not warp and because it is made of steel. it does not absorb humidity during the entire use cycle of the plaster.

Brasilata's Lean Pail has already been chosen for use in the launch of the "Super Leve" (Super Light) plaster produced by Anio.

Applied Vision expands HQ

Applied Vision is set to significantly expand the size of its headquarters in Akron, Ohio, US.

The company designs and manufactures applicationspecific inspection systems for the food and beverage industry.

The addition will increase Applied Vision's manufacturing capacity while making room for continued growth in research and development, engineering



Founded in 1997, the company has operated from its current headquarters since 2004. Additionally, the company maintains a network of regional and international service and support centres to meet the immediate needs of its customers worldwide.

"Increasing our development and production capabilities is a constant focus at Applied Vision," says Amir Novini, president and CEO. "I have enjoyed watching Applied Vision devel-

op into a centre for machine vision innovation. As we project record growth, we have expanded to meet our customers' needs."

This phase of expansion is expected to conclude in the early fall.

Stolle Brazil now fully certified

Stolle Machinery Company's facility in Brazil has achieved a major milestone by earning ISO 9001 certification on all of its production activities and services.

In 2010, Stolle Brazil was certified as ISO 9001 compliant by Bureau Veritas Certification (formerly BVQI) in several areas, and in July 2011 the facility was certified for machinery build and rebuilds. The complete scope of certifications now includes production, assembly and sales of production equipment for metal packaging, technical services, production and sales of spare parts, and rebuild of components and tooling used on machinery for metallic packaging production.



October 2011 CanTech International

HEILBRONN

HEILBRONN Container Presses – the German specialists for presses and decoiling equipment for the metal packaging industry.



Shell Line

Imeta Srl • PARMA • ITALY ph. +39 0521 1688811 • fax +39 0521 1688819

. www.imetasrl.com • e.mail info@imeta.it

www.heilbronn-container.com

REPRESENTATIONS: Met Tec LLC 10 North Ridge Springboro, OH 45066 USA Phone: +1 937 470 6768

Interbur S.A. C. Cuernavaca No. 82 Mexico DF 06140 Phone: + 55 2559 8448

Henko Trading Co. Ltd Room 613 Hongmei Commercial Building No. 8075 HuminRoad Xuhui District Shanghai 200233, China www.henko.com

Cupping Line

EASI CAN Connection S.P. Blk. 32, River Valley Close Pacific Mansion #12-34 Singapore 238436 Asia, Republic of Singapore Phone: +65 9792 1311 www.ecc-asia.com

IELBRON

GEAR DRIVEN LIFTERS

In 1989 Imeta designed the first Gear Driven Lower Lifter conversion for Angelus 60L, resulting in the following advantages:

- Increase in production speed, even with lighter weight cans and cover materials;
- Increased seam integrity;
- Reduced slipping of covers on seaming chuck and increase in chuck working life;
- Reduction in spring pressure, eliminating the problem of "mushroom flange" in can-factories.

The upgrading kit consists of six oversized lifters, splined Turret with splined Hub, and a strong central splined shaft.

In order to reduce servicing time, the Gear Driven Lifter kit can be completed with a Single Point Lubrication system; an optional High Speed Gearing can be

a "softer" seam and a reduction in wrinkle forming.



WICKETS & CHAINS FOR ALL METAL DECORATING OVENS INCLUDING BALLARD, FECO, LTG, METAL BOX, WAGNER, WELLMAN & YOUNG BROTHERS

WE OFFER TUBULAR, FLAT WIRE & ROUND WIRE WICKETS AVAILABLE IN CARBON STEEL OR 304 STAINLESS STEEL MATERIAL

WE ALSO OFFER CHROME PLATING AND PERMALON 2800 NON-SCRATCH/NON-STICK COATING

OTHER PRODUCTS INCLUDE: LITHO OVEN CHAINS, OVEN RAIL & SUPPORT BRACKETS, MOTORIZED ROLLER STORAGE RACKS, DRY-ICE BLASTING SYSTEM, WICKETS AUTOMATIC LUBRICATION SYSTEMS, LASER ALLIGNMENT SYSTEMS





DIVISION OF PERM INDUSTRIES INC.

9660 Industrial Drive, PO Box 660, St. John, IN 46373-0660, U.S.A. Tel: +1 219 365 5000 Fax: +1 219 365 4847 www.permmachine.com perm@permmachine.com

MP visits British can making plant

British Member of Parliament Mark Lancaster recently visited Rexam Beverage Can's Milton Keynes plant to gain an insight into can making first hand.

The plant visit allowed Mr Lancaster, who is the MP for Milton Keynes North, the opportunity to gain a better understanding of both the workings of the plant itself and Rexam as a company.

He also learnt about the beverage can, particularly the fact that the can is 100% recyclable. Mr Lancaster was also introduced to Rexam's Fusion aluminium bottle, which can be used as an alternative to glass in clubs.

lan Clayton, Milton Keynes plant manager, conducted the plant tour, and was pleased to welcome Mr Lancaster. "We are very proud of what we do here, and I was pleased to showcase what we achieve everyday in the factory, and how we help to make Rexam a commercial success."

Mark Lancaster MP said: "I am always keen to champion Milton Keynes as a manufacturing hub and Rexam is the embodiment of that."

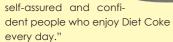
Diet Coke gets new look

Limited edition cans of Diet Coke have hit the shelves in America.

The latest evolution in Diet Coke's iconic 'Stay Extraordinary' campaign features a modern new look for fall on the Diet Coke

aluminium can and a series of new adverts on television and outof-home.

"Fall is a time for new looks and renewed energy and Diet Coke's new campaign and can design celebrate just that," says William White, group brand director, Diet Coke, Coca-Cola North America. "It's a reflection of the



The can design, created by San Francisco-based design agency Turner Duckworth, features a section of the Diet Coke logo, cropped to feature the D and the K, set against the brand's signature silver backdrop, creating a bold look for fall.

"The new Diet Coke design is at once understated and overstated," adds David Turner, partner Turner Duckworth. "The understatement of a monogram, rather than the full name, and the overstatement of the extremely enlarged logo, both demonstrate the brand's renewed selfconfidence."

The new package design has inspired the

overall visual identity of Diet Coke, and has been featured in recent digital and out-of-home activations, including the micro blogging service Twitter.

New 'Handy Can' size from Ball

A new compact can has been launched by Ball Packaging Europe. Pepsi Max, Diet Pepsi and Pepsi are the first drinks to be sold in the new 25cl format in the UK.

The shorter and more compact 25cl can format is designed to stand out from the normal and attract attention at the point of sale.

Known as the 'Handy Can', at 25cl the filling volume is the same as that of the sleek can, but its diameter is the same as that of a standard 33cl can, making it much shorter.

Pepsi Max, Diet Pepsi and Pepsi are on sale now. The brands 7UP Free and Tango will be available in the new 25cl size from next spring.

The Handy Can allows Britvic and PepsiCo UK to fill a gap in the market. Already successful with 33cl cans in the four, six and eightpack segment, both were looking for an innovative new can format that would meet the needs of the consumer and support its entry into further pack sizes.

Noel Clarke, brand controller at Britvic, said: "From our research we know that consumers buy based on the number of cans inside a multipack. The more cans in a multipack, the more consumption occasions there are and the more cans are there to share."

The Handy Can Pepsi Max, Diet Pepsi and Pepsi will be on sale in a



variety of pack sizes of 10, 12, 15, 18, 24, 30 and 36 cans, available in new cardboard packs that are easy to carry home, store and recycle.

The new steel can was developed in a close collaboration between Ball and Britvic. Both companies invested in adjusting machines and equipment at the production facility in Rugby. The two factories are located next to each other in Rugby and connected by a tunnel, which not only facilitated collaboration, but

also means that the Handy Can has a particularly low carbon footprint, as there is no distance to travel between production and filling.

Ball's Handy Can is in keeping with the trend towards new container sizes. Back in 1993, the standard 33cl or 50cl cans dominated the European market with 93 per cent of sales. There were only nine other can sizes and formats available. "Individual container formats help beverage producers to differentiate between brands and position them better on the retail shelf," explains Geoff Courtney, CanTech editorial board member and regional sales manager at Ball Packaging Europe.





CanTech International October 2011

World News

NEWS IN BRIEF

The **Can Makers**, the trade body representing the UK companies responsible for the manufacture of beverage cans, has launched a new look website.

The site www.canmakers.co.uk features a host of information on the metal packaging market and includes sections on how cans are made, how cans are filled and the history of the can.

The UK is the largest beverage can market in Europe, with around 9.4 billion cans filled each year. The Can Makers was the first organisation in Europe formed to promote drink cans. It is now part of a European network set up under the auspices of Beverage Can Makers Europe (BCME).

Production at **Tata Steel's** tinplate works in Trostre, Wales, will stop for one week next month.

More than 700 staff will be deployed to other areas like maintenance and training.

The stop in production means that 9,000 tonnes of tinned packaging will not be manufactured.

The company said it has to realign capacity with demand because the stocks of its customers are full. Other facilities in Wales, which include Port Talbot and Llanwern, will not cease production.

Heineken launched special-edition cans for the Rugby World Cup after teaming up with Paris design agency Raison Pure.

The range of rugby-related designs has been produced by the aency to coincide with the Rugby World Cup, which started last month in New Zealand.



Iconic emblems of the rugby theme decorate the front of these cans and on the back, Heineken is encapsulated in a rugby ball shaped maori tattoo.

This is not the first time that Raison Pure has worked with Heineken. Back in May the company produced a range of designs based on a musical theme.

Crown to build new plants in China

Can making giant Crown has announced plans to expand its footprint in China by building two new beverage can plants.

The company is also adding a second line at a plant that is being built now.

The new facilities will be located in Zhengzhou (Central China) and Changchun (Northeastern China). Each plant will have an initial annual production capacity of 720 million two-piece aluminium beverage cans. The Zhengzhou plant, which will serve Henan province and surrounding provinces such as Shandong, will produce 33cl cans. It is expected to be operational by the first quarter of 2013. The Changchun plant will produce 33cl and 50cl cans and is expected to be operational in the third quarter of 2013.

Crown is also adding a second line to its previously announced facility in Putian (Fujian Province). The new line, expected to be operational by the first quarter of 2013, will produce 33cl and slim 25cl aluminium beverage cans. This expansion will bring annual production capacity at the Putian facility up to 1.4 billion beverage cans when fully commercialised.

"The consumer market in China is growing at a rapid pace," comments Jozef Salaerts, president of Crown Asia-Pacific. "Adding facilities in Zhengzhou and Changchun demonstrates Crown's commitment to support our customers' growth in this critical market. The plants are also a testament to the increasing popularity of beverage cans in the region and the value they bring to consumers from both the convenience and sustainability perspectives."

Once construction is complete, Crown will have 10 beverage can plants strategically located across China. The company currently has operations in Beijing, Foshan, Huizhou, Hangzhou and Shanghai, and construction on plants in Putian, Heshan and Ziyang is underway.

Novelis expands in Asia

Novelis, the world's leading producer of aluminium rolled products, has announced the opening of a new office in the Shanghai World Financial Center to expand the company's presence in Asia.

The company has appointed James Liu as managing director, Novelis China, and director, sales and marketing,

Automotive Asia. Liu will lead Novelis'

expansion plans in China in alignment with the company's long-term growth strategy for Asia. In his sales and marketing role, Liu will drive the execution of major automotive growth opportunities for Novelis in China and Korea. He joins Novelis from Alcoa

China Rolled Products Group, where he served as vice president and managing director, Alcoa International (Asia) Ltd. In this role, Liu was responsible for commercial activities including strategic planning, sales, marketing, customer technical service, sales administration and trade compliance. Prior to Alcoa, Liu was president of Lysaght China for BHP Steel China.

"Aluminium has been growing at a much faster pace than other comparable materials," says Philip Martens, president and CEO of Novelis. "As global urbanisation and income continues to accelerate in Asia, and particularly China, the flat rolled aluminium market is expected to double in size there by 2020. The opening of our Shanghai office is an important step for Novelis to further capitalise on this significant opportunity.

> With an expansion underway in Korea, combined with our move into China, we can better serve rapidly growing consumer demand in Asia for highmargin can, automotive and specialty products."

The company is currently investing approximately \$400 million to expand its aluminium rolling

and recycling operations in South Korea in response to the growing demand for its products in Asia and the Middle East. The rolling expansion, which will include investments in both hot rolling and cold rolling operations, will increase Novelis' aluminium sheet capacity in Asia to one million metric tons annually. Novelis operates an Asian regional head office in Seoul, South Korea, leading operations and sales for its three manufacturing facilities in South Korea and Malaysia.

Ball opens new production line in Serbia

Ball Packaging Europe has officially opened a new production line at its plant in the Belgrade district of Zemun, Serbia.

The can maker says it will contribute significantly to the growth of Serbian foreign trade and economic development, with a doubling of can production fully designated for export.

The new production line, which is worth €35 million, was officially opened in the presence of state officials, global and local representatives of Ball Corporation - the parent company of Ball Packaging Europe - and local business partners. The leading international beverage can producer's latest investment in Serbia is set to create 50 new jobs and will boost production from 750 million to over 1.5 billion aluminium beverage cans a year for distribution to markets in the region and the European Union.

"Ongoing investment in technology development and production capacity has laid the foundation for the strong global results achieved by Ball," says John Hayes, president and CEO of Ball Corporation. "The factory in Serbia has so far justified our investment. We hope we will continue to do business here."



James Liu

World News

Consumer packaging report from Rexam

Can maker Rexam has released the 2011-2012 edition of its consumer packaging report, the fifth of its kind over the last eight years.

Under the title 'Packaging Unwrapped', this year's edition looks at the global trends in consumer packaging, statistical market data drawn from a number of sources including Rexam's own business intelligence, and the key growth drivers in mature and developing markets around the world. It also includes insight into the evolution of beverage packaging and to what the future may hold.

Although acknowledging the turbulence caused by the global economic downturn and an increasinaly demanding consumer base, the combined data points to a positive future for the global consumer packaging industry as a whole.

Rexam's chief executive Graham Chipchase said: "Consumer packaging is not only an essential component of modern living, but it makes a positive contribution to a sustainable society. As a global leader, Rexam is constantly seeking to forge closer relationships with customers."

The report is available to download at www.rexam. com, or by email request at marketing.info@rexam.com

Sourisseau to lead Crown's European cans and closures business

Didier Sourisseau has been appointed senior vice president of Crown Food Europe - cans and closures.

Sourisseau (pictured), who previously served as vice president of Crown's worldwide speciality packaging business unit, is aiming to drive the growth of the company's food and closures businesses in Europe.

He wants to focus on innovation, new product development and enhanced customer service and support, while also highlighting the sustainability benefits of metal packaaina.

"Despite another challenging year for the economy, our business has performed well thanks to the continued demand from brand owners for innovative and convenient packaging - two areas where metal packaging excels," says Sourisseau. "To help our customers continue their growth and better meet consumer needs with new product launches, we will continuously strive to achieve new heights by focusing our efforts on providing solutions that help them stay ahead of the game and strengthen their brand potential."

Crown's commitment to continuous innovation is demonstrated by a number of technology launches. For example, the new Orbit Closure reduces the torque required to remove the closure, making it twice as easy for consumers to open jars, and allowing food processors to



build brand lovalty.

Sourisseau will continue to drive awareness for how metal packaging can help brand which is already the highest of all consumer packaging formats, and increasing this figure is vital and achievable." notes Sourisseau, "Metal's excellent sustainability credentials frequently make it the packaging format of choice."

of Crown Europe, added: "Didier's background in developing value-added packaging solutions for a variety of fast moving consumer goods is a valuable asset to the food cans and closures business. Under Didier's leadership, we continue to provide comprehensive, expert support at every step of the production process and agin a deeper understanding of our customers' business needs."

owners, package designers and retailers meet sustainability goals. "The recycling rate for metal cans in Europe is 70%,

Chris Homfray, president

HMIGKUHNKE 2-Piece Beverage Can Measurement



Semi-Automatic Back End Station



Semi-Automatic Front End Station



Manual Gauges for the measurement of trimmed or finished 2-piece cans.

BevGauge.com

New York: 518-694-3310 Berlin: +49-30-230066-0



Celebrating our 40th Anniversary

Silgan buys Nestlé pet can assets Silgan has Silgan Holdings is a leading Can maker

acquired Nestlé Purina PetCare Company's steel can making assets for its pet food products.

As part of the deal, the US company has also entered into a long-term supply agreement with Nestlé Purina PetCare Company.

"We are very excited to expand our partnership with Nestlé, one of our largest customers," says Tony Allott, president and CEO of Silgan. "This transaction enhances our

market leading position in food cans, allowing us to further leverage our broad manufacturing platform to continue to provide a competitive advantage to customers such as Nestlé."

The purchase price for the acquired assets was \$25 million. Silgan had already begun to supply Nestlé Purina with cans for qualification purposes earlier this year and, as such, the impact of this transaction has already been included in the company's earnings guidance.

supplier of rigid packaging for consumer goods products with annual net sales of approximately \$3.1 billion in 2010. It operates 83 manufacturing facilities in North and South America, Europe and Asia. Silgan is a leading supplier of metal containers in North America and Europe, and a leading worldwide supplier of metal, composite and plastic vacuum closures for food and beverage products.

Conference Preview

Asia CanTech 2011 Preview



Gihan Atapattu

sia CanTech will take place in Vietnam for the first time ever this year. The conference and meeting point for can makers and fillers in the Asia Pacific region has grown in popularity over the years. The event, which is now in its fifth year, has become a key date on the calendar for can makers and suppliers. So much so that this year saw all supplier packages sell out well ahead of the show.

This year's event is taking place at The Rex Hotel in Ho Chi Minh City and provides a high quality setting that maximises the exchange of ideas between global suppliers and key decision makers in the Asian metal packaging industry.

The conference takes place over two days and will provide can makers and fillers with the opportunity to exchange ideas in an intimate atmosphere.

Attendees will have access to the newest technologies that reduce costs while improving efficiency and production flexibility. There will be overviews of the latest trends and developments from major companies and extensive

time for informal networking and discussion. After the success of last year the Technical Forum is returning once again and promises to be as informative as ever.

Destination

Ho Chi Minh City was chosen as the venue for this year's Asia CanTech following a number of requests to hold it there.

The Rex Hotel is a historic hotel with heritage dating back to the early 20th century when it was originally opened as a French garage.

For over 80 years, the Rex has been a landmark, as well as a witness of the ups and downs of the city's history.

Located in the heart of the Ho Chi Minh City, the Rex Hotel was rebuilt to become one of the city's best known addresses.

Vietnam is a booming market in terms of can making and earlier this year Crown announced plans to expand beverage can production capacity in all three of its existing facilities there. As part of the expansion, upgrades are planned to existing facilities in Ho Chi Minh City. Total annual production capacity will increase by 700 million cans bringing the total capacity for Crown in southern Vietnam to 3.2 billion cans.

More and more can makers are increasing their presence in this growing market. Ball and Thai Beverage Can also announced plans to build a beverage can plant in Vietnam earlier this year. The plant will supply cans to customers in Vietnam and adjacent countries and is expected to begin production in early 2012. Proof positive that there is plenty happening in this area.

Keynote Speakers

This year's lineup is one of the strongest we've ever had and features speakers from some of the world's biggest can makers.

Gihan Atapattu, president of Ball Asia Pacific, will open proceedings on day one.

Atapattu has been at Ball for just over a year after joining the company from SML Group (Hong Kong) where he was chief executive officer for three years. He was responsible for leading more than 5,000 people in over 30 locations worldwide and helped establish SML in China with Chinese retailers and brands. In 2009, Atapattu led the business to a 278% improvement in net profit. Prior to joining SML Group, Atapattu held a number of positions at Avery Dennison (Germany). These included: division general manager, EMEA; business unit manager, VIP Labels; manager, marketing and e-business.

Mark Davies, business interface manager Asia Pacific for Crown Packaging, is the second keynote speaker on Tuesday. Davies has more than 20 years experience in packaging development gained whilst working for the technology division of Crown Packaging at Wantage, UK. Prior to his current role Davies has been involved in the development of novel processes and materials related to both two- and three-piece can manufacture and, more recently, has managed Crown's Process Monitoring group. His presentation is titled 'Innovation drivers in metal packaging'.

Robert Zanetto, business development director Metal-Asia for Ardagh Group, is giving a keynote presentation on Wednesday. In the area of metal packaging, Zanetto has also worked for White Cap and Impress.

He will speak about 'Sustainable development (metal cans) for sustainable customers: a business strategy'.

Le Hong Xanh, who is the managing director of Sabeco, Vietnam's major brewery company, is the final keynote speaker. Attendees will be able to hear his views on this relatively young market.

Mark Davies

Robert Zanett

Conference Preview

Asia CanTech at a glance

When: Monday 17 to Thursday 20 October Where: The Rex Hotel, Ho Chi Minh City, Vietnam

Monday 17 October From 1pm: Registration Tabletop Exhibition Welcome Cocktails & Dinner

Tuesday 18 October Keynote Speakers and Presentations Technical Forum Tabletop Exhibition Gala Dinner and Asia CanTech Award Ceremony

Wednesday 19 October Keynote Speakers and Presentations Tabletop Exhibition

Thursday 20 October From 10am: Site visit to Crown's plant in Saigon

Site visit

This year sees the return of the site visit. The conference will finish with a visit to Crown's beverage can plant in Saigon on Thursday 20 October.

The visit will start at 10am with a plant welcome, a general introduction to the plant, its history and market. There will then be a briefing on safety requirements prior to the tour and a lunch will be provided.

The site visit will provide a fitting finish to the conference and another opportunity for networking.

Technical Forum

The Technical Forum returns once again this year. The Forum title is 'Can making fundamentals review'.

Jonathan Ellaby (vice president international operations) and Jack Knight (director international technical service) from INX International; Roger Baker, sales manager metal cans and ends from Pressco Technology; Andy Pott, vice president marketing and sales, Arc Pacific; Chris McKenzie, sales director, Tolag Pty; and Adrian Long, sales manager for CMB Engineering will provide the expertise.

Adrian Long will review the bodymaker operation and the neck forming process. Chris McKenzie will provide an overview of the wet processes for cupper lube, D&I coolant and the aluminium can washing process. Jonathan Ellaby and Jack Knight will explain the fundamentals of ink and exterior coatings for metal can decoration. Andy Pott will explain the fundamentals of Pin Oven and Inside Bake Oven operation. Roger Baker will explain the fundamentals of vision inspection systems and how they can be used to identify the causes of can defects.

Asia CanTech Awards

The Asia CanTech Awards honour the best can makers in the region. Winners will be honoured at the Gala Awards dinner on Tuesday night. Judged by a panel of independent industry experts and open to can makers or fillers of cans and ends sold in Asia, winners will be announced in eight categories.

The categories are as follows: Beverage, two-piece; Beverage three-piece; Decorative/Speciality; Aerosols; Food, two-piece; Food, three-piece; Ends/Caps/Closures; General Line. There will also be a Supreme Award winner chosen by a panel of judges.

Swan Industries Thailand won the Supreme Award last year.

Tabletop Exhibition

Global equipment and service suppliers will be showcasing their products at the Tabletop Exhibition. This exhibition provides an excellent opportunity to discuss new products and developments in an intimate setting, on all three days. Exhibitors include: Applied Vision, Pressco, Stolle Machinery, Valspar, CMC-Kuhnke, Ashworth, Sencon, AkzoNobel, Nordson, Heilbronn Container Presses and KBA MetalPrint.

Guest Presenters

Members of the CanTech International editorial board and regular contributors will help with introductions at this year's show. Jack Knight, director international technical service at INX International; Simon Jennings, owner and advisor of Nomis Consultancy; Adrian Long, sales manager for CMB Engineering; and Robert Gary, senior vice president of sales and marketing for Stolle Machinery Company will introduce speakers at the show. We'd like to take this opportunity to thank them for their time.

Welcome from the Conference Director

When we asked you last year at Asia CanTech Bangkok where you would like us to hold the next conference, Vietnam emerged as the clear favourite – but I had no idea just how popular it would be. The response has been overwhelming and we are looking forward to a much bigger show this year – as we go to press there are over 150 can makers registered. I have been out to Vietnam several times during the course of the year to make sure everything will meet the high standards we've come to expect and I hope you won't be disappointed.



It has not been easy finding a big enough hotel, as most hotels in Saigon are around 250 to 300 rooms. But we

have stuck with the Rex as it has a charisma all of its own – it's a celebrated landmark in the city's history and the setting in downtown Saigon couldn't be better. We needed an overflow hotel for extra rooms, and have chosen the Hotel Continental, which is less than five minutes walk from the Rex. It is a French colonial hotel with huge rooms, so for those of you who end up there, I hope you like it.

We have a great line-up of keynote speakers this year, as well as a packed programme of presentations plus the Technical Forum – our thanks as always to the guys who give their time for this. I'd also like to thank our own staff, namely Chrissy, Victoria and Alec, who work so hard at this time of year to make the show a success.

We look forward to your feedback and of course your suggestions on the venue for 2012.

Neil McRitchie, Publisher, CanTech International



The Technical Conference and Exhibition that brings together global suppliers and can makers and fillers from across Asia

2007 Bangkok, Thailand 2008 Kuala Lumpur, Malaysia 2009 Bangkok, Thailand 2010 Bangkok, Thailand 2011 Ho Chi Minh City, Vietnam

2012 ?... You tell us your favoured destination!

> please e-mail suggestions to info@asia-can.com

info@asia-can.com www.asia-can.com

Ian

Organised by





Clarke's can corner!!

Stephen Clarke is the customer technical service (CTS) manager for Western Europe at Ball Packaging Europe. He will share his knowledge of the industry in every other issue of CanTech International



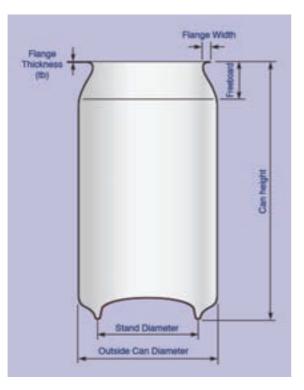
Stephen Clarke

ver the next few months I will share with you my knowledge of can and end making, can filling, can handling, double seaming and fault finding. For me it's just another day at work. My background comes from being a customer to a supplier, and how I see it from one side of the fence to the other. I am an engineer by trade and served an apprentice at Bass Brewery in Burton on Trent, now known as Molson Coors Brewery. At the end of my time there I was asked to be part of an exciting team to fill cans in Bass for the very first time. More importantly, it was the first time ever that any can filler had run 440ml

cans at 2,000 cans per minute. A remarkable feat even by today's standards.

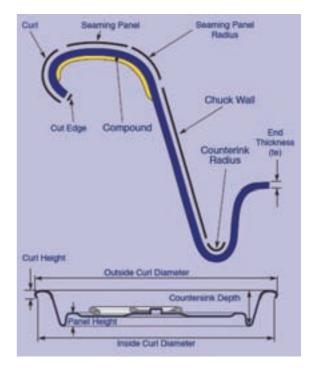
However in 1992 I decided I wanted a new challenge and joined Continental Can as it was known then. Nowadays we are Ball Packaging Europe, part of Ball Corporation. I joined the CTS team as a young engineer and through development I am here today. I have seen a vast amount of filling lines from high speed volumetric fillers at 2,000 cans per minute to some lines which only go to a maximum of 150 cans per minute where the fill heights were controlled by topping up cans along the filler seamier transfer or splashing some product out by inserting a finger to "splash" product out. I couldn't believe this either!

I have put liquid nitrogen into cans as development of the widget on a cold Sunday night in Cape Hill, Birmingham and inspected a second hand seamier in the United Arab Emirates at 45°C in the shade. Most of this has been self



educated, but more importantly I found that what works in some locations does not necessarily work in all locations.

In all my years of working with 'tins' I get to hear all sorts of terminology about our beverage cans such as the 'bottom', 'the lid', the 'ring pull' to name but a few, so to get us all off on the right foot I wish to correct 20 years worth of incorrect terminology. The drawings below mention just a few of the technical terms which I shall refer to going forward.



The beverage can is a simple but effective container which holds a vast amount of beverage products. This robust container has to arrive at the point of sale and demonstrate to the consumer that the product is worth buying.

The can making process

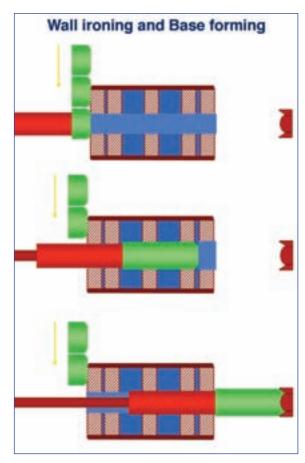
The can maker receives flat coils of aluminium or steel in various gauges depending upon which can size to manufacture. Each coil is inspected and taken in house for processing.

The can making plant is split into two main areas commonly known as the 'front end' and the 'back end' whereby the front end is where the can dome, body and walls are formed and the back end where the can is decorated, necked, flanged and palletised.

The flat coil is led into the cupper press and the initial 'cup' is made, this is the initial pre form of the can in preparation for the main bodymaker. Dependant on which can manufacturer these cups all have lanes identification marks which allow for traceability.

Can Basics

The bodymaker is the main forming machine which produces the can body, sometimes known as a W.I.M (a Wall Ironing Machine). Within this machine the can body dimensions are strictly controlled to give precise mid wall, top wall and dome dimensions of the cans. Some cans nowadays have a mid wall thickness of 0.094 mm on



aluminium cans and even less on steel cans, just take the time and compare that to a human hair, now one can understand the tolerances these machines work to.

If you look at the dome of the can you will see some markings. This is known as the bodymaker ID. As before with the can cup, the can maker can use this identification for tracing back in the event of a problem. We now have a basis for our can, with pre-determined wall thickness, and a dome profile for strength.

We now need to wash our can to get rid of all the lubricant we have put on it for the wall ironing process and also to etch the can ready for decorating. The can goes through various wash stages in the washer tunnel and comes out hygienically clean ready to apply the decoration.

Lacquer

Now we have a clean decorated open topped can but no neck, flange or inside lacquer. The next stage of the process is the internal lacquer spraying machines. This stage is also dependent on whether you are making steel or aluminium cans. Aluminium cans get the internal lacquer spray before the necking process but some steel manufacturing plants have one application before the necking process and one application after the necking process.

This inside lacquer has to be food contact compliant and also all the can maker customers have to approve this lacquer as it is in direct contact with their products. A can maker can provide different lacquers from differing can making plants and more importantly different amounts of lacquer applied dependent on the product to be filled in the beverage can. This is the effective barrier or the filled product to the beverage can. The lacquer is sprayed into the rotating can via nozzles to cover the entire internal surface of the can and then it is conveyed through a high temperature oven for curing. The barrier is now complete.

Necking and flanging

Following the lacquer process we now have to neck and flange the can. We have all heard the terms 206, 202, 200 diameter and this comes from the old American imperial sizes whereby 200 is two inches and 202 is 2 and 2/16ths and 206 is 2 and 6 16ths. More modern quotes are 50mm, 52mm etc, all can makers and some machine equipment suppliers know of these 202 and 206 terms. Alternatively 200 diameter is also known as the slim can. More innovative can makers have now made a sleek can which is in between slim can and the standard can, which we all know of.

The cans are necked by various methods by different can makers from spin neck to full die neck process, but no matter which way the cans are necked, the control of this process is critical to ensure we get a controlled shaped neck form on the can plus a correct flange width. Aligned to this process we also get the flange thickness. This flange width and flange thickness is vitally important to providing a good double seam.

In different can making plants there are various ways to apply the clear varnish (aluminium cans only) on the stand diameter. Some plants apply this at the washer and some plants apply this prior to the palletiser. Whatever the application process, this is required to ensure a smooth mobility around the can conveyors at the manufacturing plant and at the filling line.

Finally, 100 per cent of the cans are inspected by camera ensuring defect free products, which are then palletised into the various palletised formats. Commonly, UK layer format is 351 cans per layer, Benelux and France pack layer format is 389 cans per layer and German layer format is 360 cans per layer with each having their own respective pallet dimensions. Different can fillers require different packaging.

All pallets have specific pallet labels referring to the products and quantities and key manufacturing data. It is very important to record all pallet ticket information in the event of any queries with your can supplier. This information is the only link back to the can supplier whereby traceability can be sourced.

So this is a brief guide as to how a can is made. In my next article I will talk about the manufacture of the can end. So to finish off where I started with terminology, it is called an end, not a cover or lid or a top but an end! \Box

KBA Metal Decorating



e

TTT

METALCOAT 480 The new Coating Generation.

Excellent coating results

MAIGOALAND

- 25% reduction in changeover
- Touch & Control operation
- New design for UV lacquer application
- Sheet thicknesses down to 0.100 mm

KBA-MetalPrint GmbH

Fon +49-711-6 99 71-0 \cdot Fax +49-711-6 99 71-670 info@kba-metalprint.de \cdot www.kba-metalprint.de

- Individual roller drive system
- Motorized roller positioning
- 2 minutes cylinder change

5

- Laser-assisted zero setting of coating cylinder
- Touch panel with memory function



Beading, necking & flanging

A master of trades

The current Cantec premises are located in an old industrial area, still owned by the giant industrial ThyssenKrupp Group. In 1959, the Krupp Group started its activities in can making, which was then a fast growing market with the demands from consumers for prepared foods in supermarkets. The can making machinery part of Krupp developed well and in 2000, the Swiss SIG Group bought it and renamed it SIG Cantec. Since 2006, Cantec has belonged to the Swiss Soudronic Group, a leading supplier of can making machinery. Cantec is now fully integrated within the Soudronic organisation, though it is still a separate legal entity.

The evolution of Cantec

Cantec specialises in high-speed can making and end making systems, in particular its Can-O-Mat high-performance system that combines all operations from welded body to finished can. More than 600 Can-O-Mat lines have been sold worldwide. Similarly the End-O-Mat for the production of ends, caps, shells for easy-open ends, rings etc has also been a success.

"The concept of one machine for all operations is still successful and we keep improving the operations in the machine, with small and sometimes big steps," says Geide. "More than 80 per cent of our lines are sold outside Europe. In Europe itself investments in three-piece can making lines have been quite limited in the last decade or so. We supply mainly to Asia, Africa and the Americas. If customers want a demonstration of new Cantec lines in operation we often have to do them outside of Europe. For the rest,



Shaped can double action

the recent revaluation of 20 to 30 per cent of the Swiss Franc versus other currencies affects us only in cases when we offer a complete turnkey line."

> Though the supply of its machinery mainly takes place outside Europe Cantec keeps virtually 100 per cent of the production of its machinery in-house in Essen.

"We do not have series production. in all our components there is a lot of know-how involved and



CanTech International correspondent Evert van de Weg speaks to Rolf Geide, general manager of Cantec, and Robert Bauerdiek, commercial director, about the company's can making machinery and new developments

lines worldwide

therefore the long process of bringing suppliers of ours to our level of experience does not pay off, apart from additional delivery delays we would create," adds Bauerdiek.

Cantec is continuously striving for improvements in the processes of its machinery and real innovations. As an active EMPAC member, Soudronic and its subsidiaries like Cantec focus on sustainability issues in order to demonstrate the ecological benefits of metal packages.

"A large part of our research work is guided by our wish to further downgauge cans. We participate actively in the so-called 0.100 network in which Soudronic, Rasselstein and KBA-MetalPrint are pooling their expertise," explains Geide. "The aim is to perfect the processing of 0.100 mm gauge cans through the complete production chain,

A large part of our research work is guided by our wish to further downgauge cans. We participate actively in the so-called 0.100 network in which Soudronic, Rasselstein and KBA-MetalPrint are pooling their expertise

from coil to filled cans. It is an important project destined to improve our competitive position versus our real competitors, namely the plastic and glass packaging industries, carton packs and deep frozen foods. There will be even more participants involved in future as the filling machines should also be able to handle these ultra-thin cans. With regards to the production speed for cans, I think we are at the point that our production speeds match with the speeds of other machinery in the production chain. We recently supplied a high-speed Can-O-Mat for diameter 52 mm cans destined for tomato paste with a capacity of

Beading, necking & flanging

1,300 cans per minute to a Chinese customer. But most of the enquiries for can making machinery demand a production speed from 400 to 800 cans per minute."

Parting

Though the Can-O-Mat is an established production system, Cantec continuously works to make the functions perform better.

"In our business the jumps in development may not be as big as in new packaging materials like PET but there are new developments," notes Bauerdiek.

Geide adds: "Parting is one of the areas where you can really do something. The parting system on our Can-O-Mat for can bodies that are pre-scored is an interesting operation because you are able to increase the line speed easily. You can use the high welding speed of the welders. During the recent Metpack show we demonstrated how you can double the speed of 600 cans per minute for 0.13 mm thick half litre cans to 1,200 cans per minute, producing a pre-flange during the parting process. We also developed parting without producing a pre-flange and that gave us the possibility to combine parting and dienecking. Our final proposition to customers is always based on their individual demands."

Necking

To illustrate the progress in necking technology Geide showed me a sample of a diameter 65 mm can, necked in four steps to a neck diameter accommodating a 57mm easy-open end. It is the 0.25 litre can made in China by ORG for Red Bull on Can-O-Mat lines. The wall thickness of the can is only 0.12 mm.

"We have a lot of experience in necking but we had to put quite some effort into this diameter reduction," remarked Geide. "It was a challenge for us to produce



A 0.12 mm four-fold neck

such a downgauged three-piece can as we are in direct competition with two-piece DWI beverage cans in this case. With our 0.12 mm wall thickness we are not that far away from the two-piece can wall thickness and as the bottom under our can can be thinner, our three-piece can is in total lighter than the two-piece version.

"We do the necking of this can in four stations. First we apply a long draw, then shorter draws. Necking such thin cans is different to necking thicker cans. Moreover, the quality demands for this can are high: absolutely no wrinkles in the neck, and an excellent surface, so there was a lot of development work necessary which led to proprietary know-how."

Flanging

Flanging is another operation that underwent big changes after tinplate became so thin and hard. Geide adds: "To avoid flange cracks in very thin DR tinplate we apply our spin

flanging. The smaller the can diameter gets the fewer



Cantec die expanding

spins we can apply and the more difficult it becomes to produce flanges without cracks. But after further development work aimed at stabilising the flange area we managed to get good results. It is important to have a good flange to realise the high seaming speeds that fillers demand."

Beading

Cantec previously carried out important research work on beading in the framework of the 0.100 mm network projects. Beading profiles and the beading process are important factors for the axial load of food cans.

"We had to develop special beading profiles for the thin and hard tinplate for the 0.100 mm food can. As large can makers often have their own patented profiles we wanted to make our own profiles that would match the new demands," comments Bauerdiek. "Of course we use FEA-based calculations to design these beading profiles. Customers appreciate our work in beading profiles as they know that our extensive experience helps them to get an optimised beading profile."

Shaping

Geide also paid special attention to the improved shaping possibilities of the Can-O-Mat. "At Metpack we presented our improved segment shaping. We have adapted the tools. We changed the material used for the tooling and the design of the tools in such a way that they function more smoothly. The Can-O-Mat on our booth produced shaped cans at a speed of 600 cans per minute. Using an improved process the cans no longer leave the segment impressions that we all know about. Marketing people at the brand owners are often of the opinion that these impressions give a cheap image to their products. Our trick is that we carry out a second shaping operation but with the same mechanics."

When I take a tour through the Cantec plant together with Rolf Geide, I see Can-O-Mat machines in various phases of assembly. I am left impressed by the high level of professionalism of the Cantec staff, which is reflected in their high-quality machinery.





| Eindsestraat 129 | Τ+ |
|------------------|------|
| P.O. Box 56 | F + |
| 5100 AB Dongen | E ir |
| The Netherlands | I w |

T +31 (0)13 579 26 00 F +31 (0)13 579 92 00 E info@rosario.nl

I www.rosario.nl



USED METAL DECORATING EQUIPMENT

MAILANDER/LTG COLOR LINE (ONLY 6 YEARS RUN TIME)

- (2) MAILANDER 122 PRESSES
- MAXIMUM PRINT AREA 44 11/16" X 37 13/16" (1135mm X 960mm)
- MICROGRAPHIC INK FOUNTAIN EACH UNIT
- EPIC DAMPENING SYSTEMS
- INTERDECK U.V. CURE (2 LAMPS)

- MAILANDER 469 TRAIL COATER
 WITH ANILOX
- 33 METER LTG 3 ZONE OVEN
- LTG AUTOMATIC DOUBLE STACKER
- LINE RATED AT 6600 SPH
- ALL MANUALS AND DRAWINGS
 INCLUDED

PLEASE CONTACT US FOR DETAILED SPECIFICATIONS, PHOTOS AND QUOTATIONS

Division of Perm Machine & Tool Co. 'inc. 9660 Industrial Drive, PO Box 660, St. John, IN 46373-0660, U.S.A. Tel: +1 219 365 5000 Fax: +1 219 365 4847

perm@permmachine.com www.permmachine.com





Since 1982–Producing QUALITY PRODUCTS

For The Can Manufacturing Industry Specializing In Rubber, Neoprene and Urethane Products For The Two- and Three-Piece Can

BEAR PRODUCTS

8833 Industrial Lane • Rancho Cucamonga • California • 91730 Tel: +1 909.484.5924 Fax: +1 909.980.8195 email: bearpad@mcn.org www.bearproducts.com

A one stop shop

ontainer Fabrication Machinery (CFM) president Gary Alexander says the decision to join forces with MEM Holland will allow both companies to offer a more complete service in the area of used equipment.

The two companies are the largest used can making machinery dealers and have joined forces to offer a one stop shop for can makers around the world.

CFM and MEM Holland have agreed to share technical knowledge, support and their available inventory to can makers.

Both companies reached agreement at the recent Metpack trade show in Essen, Germany. Michael Thomas, managing director of MEM, suggested the joint cooperation during a meeting with Alexander.

"Although MEM and CFM have competing items in some areas of our used equipment inventory, in many instances our inventory complements and rounds out the other's inventory," explains Alexander. "For example, MEM has more slower speed machinery than CFM and CFM has more aluminium beverage equipment than MEM. Our customer bases differ slightly geographically so between us we truly cover the world more completely than either company on its own. Additionally, MEM has a line of new machinery that can be offered not only through MEM, but also through CFM in situations where it is appropriate to the customer's requirements."

MEM commercial director Hylke Hogenbijl added: "The can making industry will now have a larger selection of used machinery to choose from while also having the option to consider new machinery from MEM's product line of three-piece can making machinery. Can makers who are looking for used can making machinery in any area of the industry and at any speeds from slow speed manual machinery through to the latest high-speed used complete lines or complete plants will be offered a one stop shop by CFM and MEM."

An example of this is a new powder stripe system that MEM has supplied to CFM. Alexander is hoping to install this new and competitively priced unit in a major US can making operation before the end of the year.

"This is a perfect example of where we can help enlarge the market for MEM's low-cost, high-quality new machinery," he adds. "It can be utilised within the domestic market of CFM. This helps our customers utilise used and new machinery into the same project. At the same time it helps MEM expand its market for new machinery as well."

Changing times

This mutual agreement is just one of the many steps that MEM has taken this year. The company recently opened a showroom at its warehouse in Berkel en Rodenrijs in



The two largest used can making machinery dealers have joined forces. **US based Container Fabrication Machinerv** and MEM Holland spoke to CanTech International about the agreement

The can making industry will now have a larger selection of used machinery to choose from

Rotterdam, Holland. "We have two complete can making lines (starting from a duplex slitter all the way to the palletizer) in order to show our products to customers," says Hogenbijl. "One line is set for a 99mm food can and the other line is set for a 153mm paint can."



Hogenbijl believes one of the biggest changes in the market has been customers' demand for higher speed lines. "In our opinion it is a logical outcome of the fact that we are in a recession which means factories need to improve production capacity in order to get more out of their cost and make profit. More and more automatic machines are required and they need to be easy to operate."

Products

The company's product range starts at semi-automatic machines, with a



Examples of overhauled machines

Used Equipment

production speed of 15 cans per minute.

"We have a warehouse of 5,000m² which is always full of machines. This means we have a stock of more than 1,000 machines on average," explains Hogenbijl.

The company, which only deals in three-piece can making equipment, currently employs 19 people. "We work on a basis that we are continuously searching for available used equipment. Since we know the market well, we know where to look and find equipment and we know how this equipment will be of interest in the market," remarked Hogenbijl. "In this way we decide whether to buy the equipment or leave it for the moment and try to find a customer for the equipment first."

This meant that MEM did not have to de-stock during the worst of recession. "We do see the mar-

ket is in a rough time and big investments will be put on hold for the moment. However, the food industry market will always be a basic need, so we are not worried for the future," states Hogenbijl. "The advantage of the recession for us as a second-hand dealer is that some customers are looking for refurbished equipment instead of new. However, since we deal in new equipment as well for a reasonable price compared to the rest of the market, we try to catch both focus groups."

Maintaining consistency

The Cazander brothers have been active in the area of buying and selling used can making machines for the metal packaging industry since 1996. Co-owner Arnold Cazander talks to CanTech International about the marketplace.

Over 350 companies in more than 80 countries have sold a can making machine or complete line to Cazander or bought such equipment from the company. That's a statement taken from the Cazander website and gives an indication of how demand for used and refurbished equipment has always been there.

• Over the last 15 years we have dealt with around 400 can makers around the world

Whether or not that demand has increased recently is open to debate. But according to Arnold Cazander, the Dutch company's level of work has stayed at a consistent level over the years.

"In recent years we have done a bit more business in the area of printing and coating lines than in can and end making machinery but this could easily change over the next year," he says. "The recession did not really affect our business and what we are seeing in the factories is that customers are using a combination of both new and second hand equipment."

With sales offices in Holland and Spain and a modest total of just six staff, Cazander also makes use of Veldkamp's



A Mawag slitter that Cazander sold to a customer in Brazil

workshop where it can use the expertise of a large number of technical specialists who carry out projects for Dutch tin can manufacturers as well as for international producers such as Crown and Ardagh Group (formerly Impress).

Cazander works on larger projects together with its partner Veldkamp Technische Service BV, also from Holland. This combination allows them to dismantle, pack and load complete can making factory inventories.

"Through our 15-year partnership with Veldkamp we are capable of carrying out large projects. Veldkamp has almost 100 technicians working in the widespread packaging industry (paper, plastic, metal) and therefore we have access to a great variety of skills and knowledge to assist our customers," adds Cazander.

A mass market

The company also has storage facilities in the Netherlands and has approximately 300-350 machines in stock.

"Customers can see the full list on our website. Over the last 15 years we have dealt with around 400 can makers around the world. The trade in used can making equipment makes up almost 100 per cent of our business," notes Cazander.

"This year we started representing CNBM International from China through whom we are now offering tinplate to several countries in Europe and Latin America. The tinplate brands we represent are CMAX and HBIS. Our storage space is around 3,000 square metres and our workshop is around 1,000 square metres."

Cazander says the company is constantly restocking in an effort to keep up with demand. "We supply machinery to both the two – and three-piece markets. We purchase individual machines almost every month and every quarter we buy one or two complete lines," he notes.

Going forward, Cazander is unwilling to make predictions about whether or not demand for used and refurbished equipment will continue to grow.

"The only thing I can say is that our annual sales have been at more or less the same level over the last 10 years, between \notin 2-3 million. With this volume we are satisfied and are able to fulfill all our obligations both internally and externally," he concludes. \Box



EUROPE • THE AMERICAS • ASIA UK +44 1737 824500 Germany +49 9643 2058 29 USA +1 440 237 4439 India +91 22 2528 5442 www.gewuv.com sales@gewuv.com New Life For Leak Testers

NEW **Test Alert** system updates all can and end testers with 21st century technology

User-friendly graphic interfaceColorful touchscreen display

Easy menu-driven setup with promptsTracks each tester pocket's history

Absolute leak readings shown in PSI
Leak readings transferrable to all testers

Stores up to 3 different can specifications

Predicts and prevents maintenance shutdownsEmail reporting and network compatibility

NTROLS. INC.

METAL SENSING SOLUTIONS

• Error messages with helpful troubleshooting tips



Seven-Ogun International 670 Lakeview Plaza Blvd · Suite K Worthington, Ohio 43085

t 614 888 8939 · f 614 888 8938 *info@sevenogun.com*

BOUTIQUE SERVICE QUALITY WITH LARGE OPERATION CAPABILITIES

4528 Gateway Circle Dayton, Ohio 45440-1711 USA Phone: +1-937-435-8659 Fax: 937-435-2091

vip@primecontrols.com www.primecontrols.com

Seven-Ogun International, LLC

- Photopolymer Printing Plates
- Printing Blankets
- Pre-press equiptments/services





General Cans

Decorative designs

Turkey's steel can manufacturing industry has undergone a shake up in the past two years with several companies deciding to close down production due to low prices and overcapacity in the market. David Hayes reports on a company that is bucking this trend the global financial crisis and yet to recover, manufacturers are looking to introduce further production efficiencies and raise quality standards to maintain their competitive edge in future.

Teksan Metal Printing and Packaging Products is one of Turkey's leading decorative and general can makers.

"We have improved our production system for less handling and to increase efficiency. We have improved our machinery and the moulds we use as well," comments Gokhan Aktas, managing coordinator at Teksan. "We get client feedback and carry out R&D to do things better. With moulds we do everything we can to obtain a cleaner and nicer surface finish. We make sure there are no sharp edges or scratches on the cans. Most of our products are made in a similar style so we apply new techniques to all our cans and get good results."

Teksan specialises in the production of general cans of which about 50 per cent are fancy decorative cans made to hold a wide range of products.

"We have started making some new can shapes and sizes recently. Also, we are working on the quality side. We take something and make it better," Aktas says. "We have added new products as clients want new can shapes and sizes."

New trends

More clients have ordered embossed designs for various decorative cans recently with a trend emerging for some customers to order cans with hinged lids.

ston

While round decorative cans remain the most common shape, some clients have started switching to rectangular, hexagonal and oval cans to create more variety among the can shapes they use.

"New cans come from customers' and our ideas. We try to work with clients who support us, then we are in a winwin situation," Aktas notes. "Usually we create new products for clients after this process and with their feedback we get good results."

Promotional gifts

Teksan produces decorative cans to hold a wide range of products including confectionery, whisky, wine, watches, DVDs, books, cosmetics and a variety of promotional products.

Some cans are supplied through trading companies who contact packing companies that combine consumer products with decorative can packaging for their own clients.

Aktas says that Teksan has supplied cans to hold Harley Davidson brand clothing and to fill with Nivea skin care products. Moggi, the cooking ingredients company, has ordered presentation cans while Shell Oil recently ordered promotional pencil boxes that will be given to customers.

"We have made steel cans to put power tools in; also, to hold mobile phones and cameras. We have done projects for tourist souvenir shops for cans to be sold empty or for shops to fill with products," Aktas says. "We have done big orders for dried pet food cans for dogs and cats. Also, we supplied fancy cans to pasta companies who put eight small packs in a large can sold as a Christmas gift."

Attractive decorative cans are often used as upmarket packaging. "With watches, decorative tin cans can add value to the product," Aktas says. "The tin can protects the watch when we put sponge separators inside which act like a cushion

> in the heavy duty steel can. When mid-price watches are packed in steel can packaging this increases the retail price as our clients have a lot of pricing flexibility with midprice range watches."

Sheer volume

Teksan's factory is located in Istanbul and employs about 80 workers. Depending on the time of the year and the volume of orders received, the factory operates two to three shifts per day, six days a week.

The total number of decorative and industrial cans produced ranges from 300,000 to 600,000 cans per month

depending on the can designs ordered and the time of the year. Decorative cans account for about 50 per cent of the company's output and general line industrial cans the other half.

Aktas noted the company recently has expanded its production capacity with the installation of two automatic presses and an automatic decorative can line which operates at twice the speed of the company's existing semi-automatic lines.

Until recently Teksan used only semi-automatic machines to make decorative cans. This is due to semiautomatic machines' greater operational flexibility which is an advantage when making decorative cans as most orders are smaller than orders for industrial cans.

To make three-piece industrial cans to hold chemicals, paints and other products Teksan uses semi automatic and fully automatic lines which include an assortment of European, Turkish and Chinese machines.

"To lower costs we have started to switch some lines to automatic production. Clients are happy with this," Aktas states. "We have an aggressive production schedule. We make most cans in three weeks and deliver them within four to five weeks in Europe."

Teksan's printing facilities include a Crabtree two-colour printer and a Mailänder coater. The average printed can design the company supplies has four colours.

The actual minimum quantity that can be ordered is 5,000 to 10,000 pieces per item depending on the size of the tin can.

Location, location

About 80 per cent of the company's total decorative and industrial three-piece can production is supplied to the local market while 20 per cent is exported. European Union countries are a major target – competitive pricing and quick delivery times are expected to provide Teksan with a competitive edge in Western Europe.

"We almost stopped exporting in 2008 with the global economic crisis but then in 2010 we had the same export numbers as before 2008," Aktas says. "Our mid-term target is 50 per cent local sales and 50 per cent exports. The likely split between decorative and general line cans is hard to say but we are not moving away from general line cans."

Chinese decorative can makers are Teksan's main competitors. Turkey is in the European customs union so there is no import duty for EU customers to pay, only VAT, Aktas notes, adding: "It's one week delivery time to EU customers. It's a big advantage as decorative can prices in China are rising and with our factory being closer to EU it is cheaper to ship there and people are realising this. For Christmas sales clients need to receive their decorative cans by August or September. They need two months for shipments to start from China but when customers come to us they know shipment will start in four weeks.

Because of plastics prices, the paint can market is going to thinner tinplate materials to lower costs

General Cans

Teksan's total can sales have grown about 50 per cent during the past four years in spite of the drop in exports during the global financial crisis. Not all Turkish can makers have fared as well as Teksan.

"Maybe there are another 15 general can companies in Turkey but a couple have closed in the past few years because of prices and because client quality standards are growing," Aktas adds. "The markets and products we have looked at are all new to get out of bottom line competition. We came up with some new can lines that did not exist before. It's not easy. At all client meetings we look at new uses of cans."

Most tea, coffee and cocoa cans are 85 and 99 diameter standard sizes closed with easy-open ends or aluminium peel off lids with a re-sealable plastic cover.

Competition

Paint cans and chemical cans made to hold solvents and other products are facing tough competition from other materials such as plastics which also are used to make paint and chemical containers.

"Because of plastics prices, the paint can market is going to thinner tinplate materials to lower costs. Our paint cans are made with tinplate about 10 per cent thinner than five years ago," Aktas says, noting that most printed paint can designs use four colours.

"Paint cans used to be more colourful. We had a sevencolour customer but to reduce costs they have reduced the number of colours. Seven or eight-colour printing cannot be justified."

Meanwhile, Teksan is maintaining its 20 per cent annual sales growth target while aiming to lift the share of exports. "The future looks bright for us. We are not changing clients and we are adding new customers," Aktas comments. "We are definitely staying out of the price drop trend. We are also continuing with R&D to develop new cans."

Graphics

Knight's knowledge

Jack Knight is director international technical service for INX International Ink Co. In his latest contribution for CanTech International he looks at the area of graphics So here we are at the beginning, They say if you want to know how something was created you always have to go back to the start. Our beginning is the graphics. The art of the reproduction of these graphics is what makes our decorated container unique to all others. This world as we know it in our profession is pre-press. It starts with an idea, a concept, and then it is turned over to the hands of a Mac operator to bring the concept to life. The programs needed to create and manipulate these digital designs are Adobe Photoshop and Illustrator, Quark Express, Corel Draw, Freehand, Upload and InDesign to name a few. The key to have a good pre-press is a cost efficient stress free workflow.

When dealing with digital printing, the types of files that are imported through the rip process make all the difference in what the output will be. Translation from the original file (in the packaging world usually a vector based program like Adobe Illustrator, Adobe InDesign or other) to any other format (PDF, TIFF, JPEG) is subject to the operator's knowledge of the output device and most times does not provide a file with enough resolution, colour space, or vector based information to allow for the expedient use of the features RIP program such as Onyx.



The key to have a good pre-press is a cost efficient stress free workflow

It is always best to get the original files and fonts with every job. This means learning how to use InDesign, Illustrator, etc to properly open, edit and prepare jobs for output to the digital printer (like the INX MD660 or 1000). PDF files can be made properly, but the designer has to know the capabilities of the output device, the colour management workflow, and other parameters. Most times they do not, so it is best to also get the original files.

With conventional printing the output of the files has also entered the digital age with the growing demand of CTP (Computer to Plate). This process takes film out of the process and enables one less step in the process. Lithographers who have entered into this process are seeing the quality of their design output to the can increase to a level never seen before in our industry. Removing the film results in a noticeable improvement to the printed image – now you have a first generation printed image.

This process, coupled with stochastic screening and high tech print machines, lets lithographers like Ball USA, Swan and Standard Can in Thailand, Daesung in Korea, Kian Joo of Malaysia and UCC of Indonesia show the world some of the finest art work on cans we have ever seen!

So let's go over some of the variables for conventional pre-press printing (remember the term conventional has two meanings, conventional printing, and printing with conventional inks).

- o Quality of input material
- Type of files
- o Artwork files
- Workflow
- o Film
- Step and repeat issues
- Process control
- o Fingerprint
- o Print production format
- O CTP
- o Increase plate output
- o Plate setter quality maintenance
- o Plate processor issues
- o Developer strength
- o Developer process
- o Plate finishing
- o Thermal polymer cure
- Quality control

The pre-press department sets the stage for maintaining quality in the pressroom, reducing changeover time, controlling colour, supporting the pressroom with files and plates that help the pressman produce a quality product. Without their expertise to maintain this quality we would not be able to fulfill our customers' needs for providing a quality-lithographed container.

If you have a problem or process that you would like to discuss please feel free to contact me anytime via email at jack.knight@inxintl.com.

Alternatively you can contact Alec at alec@bellpublishing. com

More than 200 years and the can is still king! Let's work together to keep it that way.

USED QUALITY MACHINERY FOR SALE

GENERAL INDIVIDUAL MACHINERY

- DOUBLE SLITTERS of 45". OF Blema , FMI & Continental Can
- Cevolani 3 station Combination machine
- SEAMERS ANGELUS 60L, 120L & FMC 652
- KlingHammer Double Flanger/Seamers
- Lubeca LW211 auto. one head seamer
- MB 560 Beader tools 83mm
- Cevolani BQ48 auto Die flanger dia 127+153 mm
- MB 151 auto Die flanger, tools 99mm dia
- MB 334 CRS/F auto.seamer dia.52mm
- Wilco KI5 auto can tester

COMPLETE LINES

- 2 & 3 piece can making lines
- ENDS & EOE making lines
- Pail, Drums & Irregular can Lines

PRINTING & COATING MACHINES & LINES AVAILABLE

- MAILANDER, CRABTREE SINGLES
 & MULTI COLOR
- PRINTING & COATING LINES

PLEASE CONTACT US FOR ANY EQUIPMENT YOU MAY NEED OR WISH TO SELL

Y P INTERNATIONAL LTD.

I Basing Hill, London, NWII 8TE. Tel: +44 (0)20 8458 0126 Fax: +44 (0)20 8209 0591 Email: jpypi01@btinternet.com www.ypinternational.co.uk



Can Making

Marketing matters

This article explores the world of iconic beverage can design and marketing, focusing on artwork and packaging innovation, the motivations behind them and a look at what the future holds for cans. This paper has been provided by the Can Makers, the UK arm of Beverage Can Makers Europe ccording to marketing and advertising research firm Millward Brown, part of what makes a brand iconic is the ability to possess physical or symbolic features that make it instantly recognisable. For years the beverage can has been the catwalk from which brands parade, but what is it that makes brands stand out to consumers browsing the shelves, and what is it about the can that exudes timeless appeal?

The first canned beer was introduced into the UK market in 1935 by Felingfoel Brewery using steel cans with cone-shaped tops sealed with a crown (flat top cans arrived in the 1950s). Until this point, beer came in either wooden kegs or glass bottles, so the robust can was seen as a welcome alternative, particularly

for distribution. Less then two years later some 23 British breweries were among a number across Europe offering canned beer. Breweries were saving substantial costs on storage and distribution – canned beer used 64 per cent less warehouse space than the same quantity of bottled beer and its shipping weight was less than half as much as the bottle. This freed up funds for breweries to immediately start advertising this revolutionary product in newspapers and magazines. This is what they told consumers: 'The can is lighter than glass – it's unbreakable – it's resistant to light, which can affect other types of packaging and damage contents.'

Fluorescent inks are a great eye-catcher in pubs and clubs, allowing brands to light up in front of consumers' eyes

Soft drinks move to cans

Whilst beer cans had been introduced in 1935, it wasn't until 1953 that the first canned soft drinks appeared. The problem up to this point was that cans were not strong enough to withstand the additional pressurisation which the carbonation from soft drinks presented. To many leading drinks manufacturers, particularly Coca-Cola, the bottle had been what defined their brand; it was their identity, but when the can's technology was perfected, mainly by improving the liner and strengthening the can, the pressure was on to move to the new packaging.

How packaging has evolved

In the 1950s, as well as soft drinks in cans, punch-top flat lids were introduced. These required an opener called a "churchkey "to pierce holes in them and were considered a major innovation at the time. There were two holes – one for drinking from and another for releasing air. The cone-top can with a screw top lid and conical head also featured



prominently, favoured by fillers because it could be filled just like a bottle on the production line, though as time progressed, more and more manufacturers embraced flat lids because it meant that cans could easily be stacked.

Up to 1964, steel cans had been manufactured in three parts – the top, bottom and sides. One of the major technical innovations, which arguably ensured the success of the can, was the invention of a process to make twopiece cans. This meant that the bottom and sides could be manufactured in a single process (through a process called impact extrusion), thus greatly reducing manufacturing time and cost. By 1981, two-piece cans dominated the market accounting for the majority of all UK beverage can production.

In fact, in his book Total Package: The Secret History and Hidden Meanings of Boxes, Bottles, Cans and Other Persuasive Containers, Thomas Hine says that the eventual triumph of the soft drinks can depended on two important technological innovations: the introduction of the all-aluminium beer can in 1964, and the introduction of the ringpull top – which featured on 75 per cent of cans by 1965.

Just as there have been advancements with can openings, every generation has found a way to make cans even lighter. From a hefty 100g back in 1935 to now just 10g for a typical 330ml aluminium can, the can's wall is now thinner than a human hair. This combined with a thicker domed base and a robust end makes cans light but strong – helping them thrive in the mass market. The can continues to evolve and offer consumers and manufacturers a range of features, to increase brand value or deliver a specific goal such as a competition.

Here are some of the innovations that are helping make the can even more appealing:

Embossing and printing techniques

Thanks to embossing, matt finishes and tactile coating, the touch of a can is adding another new dimension to

Can Making

the marketing offer. Tactile coating, for example, can help suggestions come to life – if, for example, a brand owner has a lemon drink, there is a tactile finish to make the can feel like citrus peel.

The widget

Introduced in 1992, this foam-generating capsule activates when the can is opened and encourages a larger "head" on the drink. Although predominately used for stout and ale originally, the widget has also

been used for milk-based drinks such as coffee.

Decorated tops

Cans on lower shelves don't have to miss out – it's now possible to print logos and messages on can tops.

neker

Coloured tabs and under-tab printing

Perfect for brand differentiation and marketing, and often used for competitions where the answer is revealed under the tab.

Shaped cans

Ideal for that standout look on the shelves, cans are able to take on different shapes thanks to blowforming technologies. The Heineken can shaped like a beer keg is one example, whilst other beer brands have launched cans in the shape of beer bottles, increasingly referred to as the bottle can.

Fluorescent and thermochromic inks

Fluorescent inks are a great eye-catcher in pubs and clubs, allowing brands to light up in front of consumers' eyes. Thermochromic inks allow cans to change colour when they change temperature, perfect for use in the home to let consumers know when their drink is at its optimum chilled temperature for enjoying. These inks are increasingly being used by beer and cider brands. Coors has used it on its Coors Light cans.



Apertures to make pouring easier

Full aperture ends allow consumers to take the lid right off the can and treat it like a cup. Used initially for food cans, these ends are now starting to be used for drinks too. The world's first full aperture end on a beer can was launched in South Africa by SABMiller in time for the 2010 World Cup.

Sustainability

Sustainability is a huge selling point of the can. It is the world's most recycled drinks package and every can which is recycled dramatically cuts the carbon footprint of the next one made because using recycled aluminium to make new products saves 95 per cent of the energy associated with the production of virgin metal.



Cans in marketing campaigns

Right from the start, breweries and soft drinks companies were excited by the can's large canvas on which to promote their product, and brands the world over are using a variety of imaginative designs and creative concepts to increase brand appeal.

Film and television tie-ins

Film studios are seeing the can as a fantastic promotional vehicle to appeal to audiences they want to attract into cinemas. In 2010, North America saw the largest film and soft drinks tie-ins for ten years when Iron Man 2 was promoted on Dr Pepper cans. The range featured 14 collectible cans displaying characters from the film. The can even made two appearances in the film.

Twentienth Century Fox chose the beverage can for its '24 –CTU' high stimulation citrus energy drink which took its hit action series '24' directly to point of sale. It was the first time an energy drink had been created around an entertainment property. The drink came in 440ml cans – a first also for energy drinks. The move is indicative of the growing value marketing teams place on the can as a vehicle for extending brand reach.

The future

The can continues to be a trusted and innovative vehicle for the drinks industry and its future is bright. Expect to see more promotional tie-ins, whilst innovations in printing techniques, inks and finishes create even more exciting experiences and propositions for consumers and the industry alike. Some experts predict that the future of the can lies in designs which save money and materials and if this is the case the can looks set to promote its excellent sustainability credentials even further. Trends suggest that consumers and industry customers seek convenience, health, sensory, individualism, comfort and connectivity (linking products to friends and sharing) from their products. We can already see how the can plays its part, and it is exciting to think how this iconic beverage packaging will perform in the future. **□**

Industry Expertise

Seaming techniques

Ole Ørts Pedersen is a senior consultant at Danish can maker Glud & Marstrand. In this article, he covers the basics of double seaming and closing machines



Ole Ørts Pederse.

ouble seaming is just one detail of a canned product, but it is an essential detail, and its importance is all too often underestimated. It can be safely said that the most common defect in connection with canned food, particularly in case of the so-called nonperishables (sterilised products), is bad double seaming. With double seaming, only the best is good enough, therefore it is necessary to look out for defects and constantly try to improve results.

An effective double seam control is equally necessary whether the seaming is made on manually operated closing machines or fully automatic machines. In the first case, human factors may cause irregular seam formation. The simple type of manual closing machine is not as reliable as the fully automatic closing machine and seaming may change appreciably during operation. On the other hand the operation speed of automatic machines is so high that the number of misseamed cans may quickly increase.

Closing machines

The closing machine must be mounted on a stable and vibrationless base. Otherwise, shocks and vibrations may cause misalignments of the machine. This will result in an uneven load on the machine parts, and the working life of the machine will be considerably reduced. There is a risk that the machine setting will change during operation and

> that will result in faulty seaming. The modern day rotary double closer has evolved into a sophisticated machine. The running tolerances are probably the closest of any packaging machinery made. For this, the manufacturing tolerances must be even closer. All this sophistication and tight tolerance results in the need for precise manufacture and assembly. To keep quality cans coming off

> > at the required speeds requires constant machine vigilance. Most canning operations have extensive preventative maintenance schedules along with qualified personnel to carry out these programmes.

The closing machine must always be well lubricated. Carefully follow the supplier's instruction. Lubrication should be made in such a way that neither oil nor grease gets into contact with the product or can – all lubricants which are used for machines or apparatus within the food sector must be approved by the sanitary authorities.

> The basic components on the closing machine, which together forms a

good seam, are seaming chuck, first and second operation seaming rolls and the base plate spring pressure.

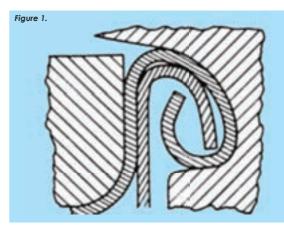
The seaming chuck must have a plane top side and sharp edge and be dimensioned so that it fits well to the end.

The first operation seaming roll must be designed so that a seam without dangerous wrinkles can be obtained.

The second operation seaming roll must be designed so that it can press the seam together, and, at the same time, push the curled part of the end flange up into the seam.

The closing machine must be set up to the specification laid down for the type of end component and body, the thickness of end component plate and body plate, and the diameter of the can, all of which are detailed in the can specification sheet from the can manufacturer.

Always check that the correct seaming roll groove/ profile is used for the dimension in question.



Setting of the closer

The seaming chuck must be height regulated so that the seaming rolls have a slide fit to the chuck (1st operation tighter than the 2nd operation).

The base plate pressure must be sufficient. The height of a closed can and an unclosed can must be approximately the same (the closed can 1/10 of a mm lower).

The rolls, bolts, and connecting links must work without play.

The first operation seaming roll must be set in such a way that it can bend down and push the end seaming panel in under the can flange as shown in figure one. Both exaggerated and insufficient forming may cause poor seam.

Insufficient forming is the most common defect. Watch out for wrinkle formation.

The second operation seaming roll must be set so that it compresses the seam well, leaving a clear impression on the inside of the body (visible when the seam is torn down).

The importance of precise setting and evaluation cannot be overstressed.

Industry Expertise

Double seaming geometry

The appearance of the double seam is first of all determined by the profile of the seaming roll. The profile of the first operation roll is constructed so that the optimum interlocking can be obtained. The compression by the second operation roll will then cause the body hook to have maximum length i.e. is embedded in the compound at the bottom of the end hook.

The condition and dimensions of the seaming tool are important for the quality of the seam. The characteristic properties of the seam are:

- Overlap.
- Body hook.
- Seam thickness (compression of the seam).
- End hook.
- Seam length.

The criterion of a correct seam is a good overlap combined with the best possible compression.

Double seaming

The double seaming principle is independent of the type of closing machine as well as the design of the can. As mentioned, the double seaming is done in two operations. The first operation assembles end and body and "rolls up" the end and the body flange. The second operation compresses the seam so that hermetic sealing is achieved.

A good result depends on many factors, the important ones are:

- General state of the closing machine wear and tear, setting, stability, etc.
- Design of first and second operations seaming cams and base plate pressure lifting cam.
- Dimension and state of seaming rolls.
- Base plate pressure of the closing machine.

When seaming irregular cans the geometry of the cam chuck must have the same geometry as the end/can involved. Therefore it is of great importance to check this to obtain the best possible seam.

The type of end and can material together with sealing compound are very important when the design of first and second operation seaming roll groove (profile) are determined.

Control of the quality of the seam

Variations of the dimensions of the seam and characteristics depend on the machines which are employed. The modern fully automatic double closing machines will often offer a high degree of precision with the settings left intact and thereby low variation norms, while old or worn machines will give greater variations and often changed setting.

In order to determine the extent of the control, a preliminary study of the dimension or characteristics to be controlled should be made. In assessing the result of such studies and planning the control procedure, statistical methods are a great help.

Layout and function of the control

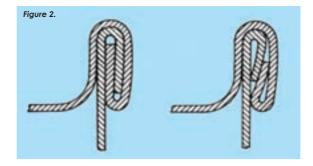
It goes without saying that production processes with great

variations and frequent changes of the setting necessitate more control work. Practice has shown that the control works well when it is done by personnel who are not engaged in production, but whose sole function is to consider quality. However, the responsibility for the outgoing quality should rest with the production staff who have the direct possibility of exerting an influence on quality. To the same extent as control personnel, production staff should therefore obtain an insight into control procedures.

Measuring and evaluation

To be sure that the seam is as tight as possible, the closing machine should be adjusted so that the seam dimensions are as close as possible to the theoretical ideal value of the seam. To establish ideal values it is necessary to measure the interior and the exterior of the seam.

As can be seen in figure two, seams with the same outer dimensions may look quite different inside.



Continuous control

If you want to be completely sure of a good seam quality and effective control of the setting of the double seamer, the following should be checked and assessed regularly:

- Visual control (appearance of the seam outside/inside).
- Seam compression (difference between theoretical and actual seam thickness).
- Body hook.
- Overlap.
- Seam length.
- Leak detection.
- The main requirement of a good seam is tightness.
- The measurable characteristics of the seam which combined will provide tightness are:
- Large overlap.
- Large body hook.
- Sufficient tight compression.

The seam specifications have been made as a guidance in connection with the setting-up and adjustment of the closers.

Today you can have advanced in-line seam control systems which check every single can during a production run, but it is necessary to be able to evaluate a seam in order to make a correct adjustment of the closer involved.

Another point which should also be mentioned in this context is the measuring of the double seam: which is the right method? Which are the most important parameters in a double seam? Significant differences are found from country to country. \Box



Seaming Developments

Seaming seafood cans

ontajes Conserveros De Galicia (MCG) is based in Vigo, northwest of Spain, and was setup with the objective of offering a specialised and integral service to food canneries, mainly with seaming machines.

New developments at the company include the recent delivery of its new R-110 seamer to the Spanish firm Conservas Iglesias. This machine is equipped with tooling to seam delicatessen fish and shellfish products into round tinplate cans, diameter 127mm x height 19mm and easyopen ends from Mivisa, with a capacity of 80 cans per minute.

The main features of this machine include:

- Single seaming station for stationary cans with diameter 50-160mm x height 20-250mm.
- Ends feeding system from both sides, which permits one operator to handle two seamers. Optional ends feeding extension.
- Synchronised elevation of groups: ends feeding, clinching and seaming for easy and quick change of height and to avoid misalignment and seam defects.
- Upper transmission group in oil bath for better maintenance.
- New transmission to the end separating group and to the clinching rolls, replacing the universal joint by a pair of belts.

"We are also manufacturing two seamers, the F-640 equipped with a tooling to seam 'anchovetas' (similar to sardines) into straight tinplate Club cans with easy-open ends and capacity of 350-400cpm, the fastest in the market, for a new factory under construction in Peru, South America," says sales manager Alejandro Martinez.

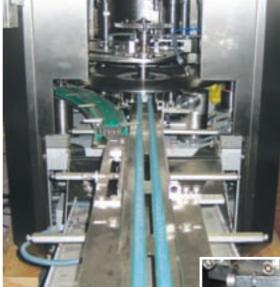
Martinez says the company's most popular seamers include the F-113, F-425 and F-640. All are used on irregular cans. "Around 70 to 80 per cent of the machines that MCG sells are irregular can seamers while the rest are round can seamers," he says.

The company has to consider a number of factors when developing a new seamer. "When we launched the F-640, the most important objective was speed and we can guarantee 400cpm on Club cans, which is double the speed of our competitors," states Martinez. "When we launched the Vacuum Seamer VSF-110, the most important objective was to get high-level vacuum and potentially aseptic conditions."

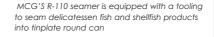
Innovating

The company has designed and manufactured spare parts, overhauled and updated a wide range of filling and seaming machines and commercialised second-hand and semi-new machines to more than 30 countries around the world.

In 2008, MCG started to design and manufacture a new range of seamers for canneries and can makers. The



The area of seaming is one of the most important steps in the can making process. In this article Alejandro Martinez from MCG updates Alec Peachey on some of the latest developments



company also increased its production capacity.

Martinez believes this constant focus on innovation has helped the company stay ahead of its competitors. "This year started calmly which was mainly due to the international financial crisis and a shortage of many raw materials.

But since May, after the European Seafood Exhibition and Metpack we have received enough orders to close this year with an increase in turnover of between 15 and 20 per cent compared to 2010," he says.

The constant lightweighting of cans is a typical issue that affects the area of seaming. "Concerning the seam, we are obliged to prove new combinations of seaming roll profiles, the seaming chuck, the pressure of lifter-plate and the settings. Luckily, we have a large collection of seaming roll profiles, intensive know-how as a service-oriented company and a skilful technical team to get the best results," notes Martinez. "We also face the problem when placing the ends on the cans, especially with hard and overfilled products, which causes many deformations and false seams. Therefore, it is also necessary to improve the ends feeding and clinching operation."

Going forward, Martinez is confident that the company will continue to have success. "At the moment 18 people are employed by the company, but we are flexible according to the market situation. The expectations for 2012 are quite positive and we hope to increase our turnover. Geographically, our markets are spread over five continents, but there can be big differences from one year to another."



The company manufactures a wide range of seaming machines

Your one-stop source for quality used can making machinery! Over 4,000 items listed on our website at www.canmaking.net

FAEL MSP 321-501 bodymaker set up on 401 diameter.



Features include 99mm lower arm, 110mm upper roller and fitted with FAEL mercury free cooling system, SPS precision tools overhead discharge conveyor model OHC 153, 401 (99mm) diameter change parts, a metal box weld monitor, no inside stripe attachment. The free standing control panel fitted with allen bradley PLC-5/40 CPU and interfaced with eaton panel mate compact display on the machine and includes a static frequency converter.

Unit has the following requirements: electrical 460 volts, 3 phase, 60 cycles, 75 kva, 100 amps, 30 liters per minute of cooling water and 6 bar air pressure. As is where is, Ex-Works Stockton, CA. Good condition.

Fleetwood 3 lane semi-automatic bagging station last ran on 202 diameter aluminum ends.



Unit features 3 lanes with entry pushers and stainless steel trays on 202 diameter. The unit is 20 feet long and 4 feet wide. Each lane is set up with 121 inch long air cylinders with cut off knifes and air to help keep the ends standing. The operator controls and all sensors are controlled by an Allen Bradley data-liner with 5/30 plc, and Sencon display with touch pad panels. Electric is set on 460/3/60. As is where is, Ex-Works, Stockton, CA.



Angelus double seamer model 62H tooled for 307 x 401 three piece cans.

Unit capacity is as follows: maximum 700 can per minute with min / max diameter of 200 / 404 and min / max can height of 110 / 800. Features

include an infeed table with timing screw, a six station seaming turret with driven lifters, single knife lid feed, magnetic star discharge and automatic oil lubrication system with free standing tank. A stand-alone electrical panel is connected and includes a variable frequency drive and an Allen Bradley 5/03 series programmable logic controller. Electrical is set on 575/3/60 controls are 120 volts and 24 volt dc. Also included is a 4 foot long hone chain conveyor that mounts to the infeed. Very good condition as is where is, Ex-Works Stockton, CA.

Clevertech dual depalletizing / unwrapping and feeding system for steel sanitary ends.



Two complete systems installed new in 2009 mounted on a common base as follows:

Snake depailetizer model TS-40 (two each), and unwrapper model UN-3 (two each) set up on 300 diameter (73mm) steel ends.

The TS-40 snake depailetizer units automatically carry out the de-pailetization of plastic wrapped ends in stick form. The machine receives the full pailets of ends with the typical "snake" wrap (with film or paper). The snake wrap is then removed from the pailet and saved onto a mandrel for later reuse. The wrapped sticks of ends are then automatically transported into the unwrapping units.

The two UN-3 units then unwrap the sticks of ends, remove the wrapping with vacuum and friction. The unwrapped ends are discharged still in stick form, and then single filed individually onto magnetic conveying. At the seaming stations the ends are magnetically restacked into stick form to feed the seamer(s).

The complete system described above is able to manage two pallets of ends, feeding two UN-3 unwrappers feeding two or more seamers on two different diameters if needed. Electrical is set on 460/3/60. As is where is, Ex-Works Stockton,CA in almost new condition, professionally removed.

Soudronic FBB 540 body maker/welder.



Welder is rated as follows. Can clameter range: 202-401 (52-100mm) Can height range: 307-506 (90-140mm) Welding speed: 30-55 m/min Output: 500 cpm Tooling: 401 Welding frequency: 540 hz

Features include all of the standard Soudronic features and includes Kato brushless frequency converter 530hz/ 60kva/460volts. Unit has a 73mm lower arm, Discon unit upgrade, and wire chopper. As is where is, Ex-Works Stockton, CA.

FAEL HSP-22-480 bodymaker set up on 603 diameter.



Features include 99mm lower arm, 110mm upper roller and fitted with FAEL

mercury free cooling system, SPS precision tools overhead discharge conveyor model OHC 153, 401 (99mm) diameter change parts, a metal box weld monitor, no inside stripe attachment. The free standing control panel fitted with Allen Bradley PLC-5/40 CPU and interfaced with Eaton panel mate compact display on the machine. The AVK rotary frequency converter has an output of 100kva, 360/456 v, 219/263 a, 120hz.

Unit has the following requirements: electrical 460 volts, 3 phase, 60 cycles, 75 kva, 100 amps, 30 liters per minute of cooling water and 6 bar air pressure. As is where is, Ex-Works Stockton, CA. Good condition.

Soudronic model SBW-270 fully automatic bodymaker/welder set up on 603 diameter.



Can diameter range: 401-712 (99-200mm) Can height range: 310-1207 (95-320mm) Welding speed: 30-35 m/min. Output: 180-200 cans/min. W Welding frequency: controlled by Unisoud

Unit is complete with 99 mm lower arm and has all standard Soudronic features for bottom welding larger diameter cylinders. Upgrades include Unisoud, Discon and varibale frequency drives for wire prolifer and chopper. Unit is also fitted with auto transformer for operation in the USA and can be removed for operation outside the USA. Current input voltage is 460/3/60. Very good condition, as is where is Ex-Works, Stockton, CA.

Let CFM turn your used can making machinery into cash!



Complete rectangular can making and integrated filling line with all components to make and fill a rectangular can with dry product.

This line was making and filling the "Maxwell House International Café" instant coffee products. All items are included except the actual case palletizer. Line is available for immediate sale. Line can be split and sold as one can making line and one filling line but is listed here and priced as one package as follows:

Can making line for approximate can size of 401 x 208 x 210 tall three piece lock seam can at 130 cans per minute to include:

- Bilss model 5325 automatic duplex slitter with automatic sheet feeder.
- Ameco Bart II robot automatic body maker feeder, no operator required.
- Callahan wing form lock seam body maker Fleetwood Habisat belt elevator.
- Callahan model 561 dual ended die flanger for rectangular cans.
- Fleetwood Habisat belt elevator. · Fleetwood Habisat belt lowerator.
- Angelus model 93p high speed rectangular can double seamer.

· Fleetwood roto feeder with mechanical end feeder conveying to Angelus 93p seamer





Can filling line for above can to include:

- Fleetwood lowerator / can cleaner.
- Tabletop conveying with three turns feeding into filler.
- All fill brand rectangular can dry product 'iller with product hopper model DHR.
- Table top conveying with check weigh brand check weigher and reject station
- Angelus model 93p high speed rectangular can double seamer.
- · Fleetwood roto feeder with mechanical end feeder conveying to Angelus 93p seamer.
- CHSC overcapper with Hoppman lid feeder from hopper.
- Table top conveyor with two 90 degree turns approx. 50 feet long.
- · Electrical is set for 460/3/60.

All equipment is offered as is, where is, Ex-Works Stockton, CA.

NEW ANGELUS AND SOUDRONIC PARTS AVAILABLE ON OUR WEBSITE



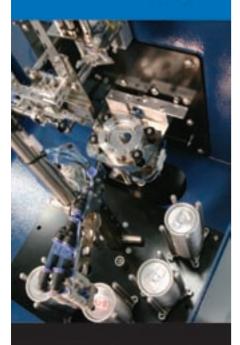
2216 E. Miner Ave. Stockton, CA 95205 USA T: +1 (209) 469-7384 F: +1 (209) 469-4826 E: sales@canmaking.net

www.canmaking.net

WORLD'S LARGEST SUPPLIER OF QUALITY USED CAN MAKING EQUIPMENT

The VersaTAB is here!

VT's new VeruaTAB provides the only solution to testing today's modern range of 50T ends. It's simplified design, fully embedded controller and advanced algorithms ensures reliability and detection of the smallest of opening forces.



CDL & Super End READY





New Equipment

New cupper and necker from Mall & Herlan

Mall & Herlan's Hi-Flex cupper and the C3000 high-speed necker are machines for the manufacturing of metal packaging that does not have any seams.

Both aluminium bottles and cans are packages that are preferably produced from a single piece of metal. In both cases, the packaging is first shaped as a cylinder with a bottom (pre-form) and this pre-form is then necked at the upper end in a variety of individual stages.

This common feature of production technology means that ever more manufacturers of aerosol cans are also thinking of producing aluminium bottles

High speed palletising

DAN-Palletiser of Denmark has installed a fully automatic palletising solution, which can handle 500 canned deodorants per minute per production line, at Unilever in Leeds, UK.

The plant in Leeds, the largest of its kind in Europe, has 300 employees and manufactures

popular big-brand personal care products. The previous palletiser installation was restricting potential line speed improvements, so needed updating. Gary Parkes, senior project manager at the site, had worked with DAN-Palletiser at Nestlé

and was convinced that the company could provide consistent, high quality and high capacity equipment.

Once the specification was agreed, the palletising solution was implemented in just four weeks. The production line feeds four different products to the two MK8/2 palletisers at a time, and each palletiser palletises the products on two pallets, keeping the products separated. The pallets are placed on a transfer car that moves into position underneath the loading plates, depending on which product to load. The full pallets are transported on the pallet conveyors through a for the beverage industry.

With the Hi-Flex cupper thinwalled packaging is created through deep-drawing and wall ironing (DWI process); with this technology it is possible to use up to 30% less material as compared to the standard.

The can manufacturer can also change between steel and aluminium. The DWI process also allows the production of singlepiece steel aerosol cans.

Depending on the configuration, the Hi-Flex cupper can produce between 100 and 600 cups per minute.

The same applies for the C3000 necker which consists of turrets that turn at a constant rate of 250rpm. Since the tur-

stretch wrapper, and are then ready for distribution. The maximum capacity is 500 canned deodorants per minute, per production line, which means 2,000 deodorants palletised every minute 24 hours a day seven days a week. It is also possible to set up the palletisers



to run several pallet types at the same time, such as Euro-pallets, Blue Euro pallets and Chep pallets.

Philip Jagger at Unilever said: "It is an integral part of our production facility, providing us with a reliable, low maintenance system, which is capable of running at high speeds and which gives us considerable flexibility and functionality. DAN-Palletiser worked closely with us to develop the final solution." Unilever Poland has now purchased six fully automated MK3 palletisers.

For further information visit www.dan-palletiser.dk



rets are fitted with 12 stations, the machine can produce up to 3,000 cans per minute. The attraction of the machine is its ability to let cans revolve several times and have another neck stage executed on each revolution.

For more information visit www. mall-herlan.de

Measuring ends

A new measurement system for can ends has been launched by CMC-Kuhnke.

The new EMS-2153 End Measurement Station provides automatic measurements for every characteristic of the can end, substantially increasing time savings over manual gauges. Featuring automatic end rotation, the new End Measurement Station completely eliminates operator error, maximising accuracy.

Using pneumatically and electronically controlled sensors, the EMS-2153 measures numerous new attributes, including: curl diameter, curl height, countersink height, curl opening, curl width, curl length, inside curl diameter, chuck fit, and the option of first bead height.

Multiple sized ends can be measured without the need for change parts or adjustments, making it easy to use.



For further information visit www.cmc-kuhnke.com

New Products

the team at Bomb Beer to help

them bring their unique beer

and unique street art labels to

market," states Andre Balbi,

president and CEO, Rexam

catching design on the Cool

Cola can – a zipper, the hallmark

of the Edeka Perquell soft drink

range - and the cartoon figure

poses in every photo taken with

Smurfit Kappa Baden Packaging

and the beverage can are great

for retail promotion campaigns.

The toon promotion grabs the

imagination and makes for a real

sales boost with young consum-

ers," savs Frank Sasse, European

For further information visit

retail director at BPE.

www.ball.com

"The unusual multipack from

the camera.

Beverage Can Americas.

For further information visit

www.bomblager.com

TECH PRODUCTS TEST AND INSPECTION

EQUIPMENT FOR THE **CONTAINER INDUSTRY**



MODEL 9505A FEATURED WITH FLAT SAMPLE FIXTURE



MOBILITY / LUBRICITY TESTER

AXIAL LOAD POP & TEAR END BUCKLE LEAK DETECTION PANEL STRENGTH AEROSOL BURST/FLOW DOME GROWTH/REVERSAL



Bomb Lager launched in cans

US Brewer Bomb Beer Company has launched Bomb Lager in 12oz cans from Rexam

Bomb Lager is a traditional Bavarian Helles made from imported barley malt, noble hops and lager yeast. Each batch undergoes a long, cold fermentation process to produce a delicate and smooth flavour.

Every production of Bomb Lager will feature a new can design developed by a local street artist.

"We are excited to offer consumers a craft beer for the masses. Bomb Lager is a beer with a subtle complexity that is inviting, rewarding and a



Ball Packaging Europe has developed a unique promotional campaign for the Edeka Hessenring grocery chain, in Germany.

The company's augmentedreality technology allows teenage smart phone users to grab the images of cans and activate an animated character for use

Rexam's Fusion bottle has been chosen as the package of choice for Hassia Mineralquellen's new beauty drink. Hassia Mineralquellen, one of Germany's biggest mineral water providers, has launched beautywater Q10 - a refreshing beauty drink containing vitamin E and a hint of grapefruit.

The resealable 25cl aluminium bottles perfectly support the image of the new beauty drink whilst protecting the contents from the damaging effects of both light and oxygen.

Ullrich Schweitzer, CEO of marketing at Hassia-Group, said: "Rexam's Fusion bottles are the

perfect fit for everyone's table," says Mike Raymond, managing director, Bomb Beer Company. "Along with creating a quality product, Bomb Lager is about artistic expression, so we wanted a package that people would want to see and be seen drinking. We look forward to utilising our partnership with Rexam to build our brand and our husiness "

Bomb Beer Company chose aluminium cans because they completely block out light which helps beer stay fresh longer, are more widely accepted at outdoor venues and are the best environmental choice

"We are pleased to work with

Cans offer augmented reality the phone's camera at the eye-

in images of friends.

The chain's new Cool Cola-Orange flavour - part of the Edeka Perquell own-brand soft drink range – has hit the shelves in 33cl sleek cans from Ball.

The cans are being sold in a triangular six-pack from Smurfit Kappa Baden Packaging. Appealing mainly to the 12-18 age group, the promotion invites youngsters to let out the toon in the can and pose with it in photos on a smartphone. Buvina one of the six-packs, or at least one of the cans, is the only way to join the fun.

All it takes is a smart phone with the Junaio AR app. Point

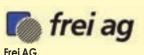
Hassia chooses Rexam's Fusion bottle

best possible packaging for beautywater Q10. The beautiful feminine shape and size of the bottle fits perfectly with the concept and positioning of beautywater Q10. The resealable closure of the bottles is also of paramount importance to us as well as the bottle's ability to protect the light-sensitive coenzyme Q10 in the best possible way."

Welf Jung, business development director at Rexam Beverage Can Europe, added: "The Fusion bottles look great and really enhance the drinking experience for beautywater Q10 consumers. It has been great working with Hassia and helping to bring beautywater Q10 to market with a packaging option that will really help it stand out from the crowd." Rexam's Fusion bottles are 100% aluminium and combine the shape of a bottle with all the advantages of the beverage can.

> For further information visit www.mineralquellen.de

360° Powder Coating for Aerosol Cans and Tubes



Hofenstrasse 18 CH-9300 Wittenbach Switzerland Tel: +41 71 292 3434 Fax: +41 71 292 3400 E-mail: sales@frei-ag.com Web: www.frei-ag.com

Aerosol Manufacturing Equipment



Germann + Frei AG Martinsbruggstrasse 92

CH-9016 St. Gallen, Switzerland Tel: +41 71 282 16 40 Fax: +41 71 282 16 50 E-mail: info@germannfrei.ch Web: www.germannfrei.ch



Lanico Maschinenbau Otto Niemsch GmbH

PO Box 3065 D-38020 Braunschweig, Germany Tel: +49 531 809 060 Fax: +49 531 809 0627 E-mail: info@lanico.de Web: www.lanico.de



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St Chingshui Taichung, Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Anilox Cleaning Systems



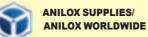
Flexo Concepts

100 Armstrong Rd, Suite 103 Plymouth MA 02360, USA Tel: +1 508 830 9506 Fax: +1508 830 0277 E-mail: info@flexoconcepts.com Web: www.flexoconcepts.com

Anilox Coating Systems



Anilox Metering Technology Unit NM10, The New Mill, George Street, Milnsbridge Huddersfield HD3 4JD, UK Tel: +44 1484 652 680 Fax: +44 1484 652 228 E-mails: steve@aniloxmt.com pete@aniloxmt.com david@aniloxmt.com



Sole Suppliers of Hayneswood Coating Systems

Americas and Asia Steve Harrop anilox@me.com Tel: +1 831 464 3445 Fax +1-831 464 3445 UK and Europe Deborah Lenehan deborah@hayneswood.co.uk Tel: +44 161 620 5337 Fax +44 161 621 5974

Bailing Machines

BSargiani

AUTOMATIC MACHINES AND PLANES TOR METAL CAIN MANUFACTURING

Sargiani SpA Via Farnesiana 84 29100 Piacenza Italy

Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com

Base Reforming Machines



Belvac Production Machinery Inc 237 Graves Mill Road Lynchburg VA 24502-4203 USA Tel: +1 434 239 0358

Fax: +1 434 237 0330 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



CarnaudMetalbox Engineering plc Dockfield Road Shipley West Yorkshire BD177AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com

Beading Units



CarnaudMetalbox Engineering plc Dockfield Road, Shipley West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com



Germann + Frei AG Martinsbruggstrasse 92 CH-9016 St. Gallen Switzerland Tel: +41 71 282 16 40 Fax: +41 71 282 16 50 E-mail: info@germannfrei.ch



Ruey I Machinery Co Ltd No 173 Sec 1 Kong Pu Road Wu Chi District Taichung 435 Taiwan Tel: +886 4 2639 7261-2 Fax: +886 4 2639 7263 E-mail: rueyi@ms42.hinet.net Web: www.rueyi.com.tw

Body Makers D+I



CarnaudMetalbox Engineering plc Dockfield Road, Shipley W Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com To advertise, contact Victoria Deakins on +44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com



OKL Can Line Inc 11235 Sebring Drive Cincinnati OH 45240, USA Tel: +1 513 825 1655 Fax: +1 513 825 1948 E-mail: sales@oklcan.com Web: www.oklcan.com

Bodymaker Spares & Repairs



OKL Can Line Inc 11235 Sebring Drive Cincinnati OH 45240, USA Tel: +1 513 825 1655 Fax: +1 513 825 1948 E-mail: sales@oklcan.com Web: www.oklcan.com

Can Conveyors/Conveying



Arrowhead Systems, Inc. Arrowhead/Busse/SJI Corporation 124 N Columbus Street Randolph, WI 53956, USA Tel: +1 920 326 3131 Fax: +1 866 580 3212 E-mail: inquiry@arrowheadsystems.com Web: www.arrowheadsystems.com



Codi Manufacturing Inc. 14352 W 44th Avenue Golden CO 80401, USA Tel: +1 303 277 1542 Fax: +1 303 271 3894 E-mail: jjones@codimfg.com Web: www.codimfg.com

Fleetwood Calde Wyard

FleetwoodGoldcoWyard 1305 Lakeview Drive Romeoville IL 60446 , USA Tel: +1 630 759 6800 Fax: +1 630 759 2299 E-mail: sales@fgwa.com Web: www.fgwa.com

Buyers guide



XETERA (Thailand) Co Ltd 1/8, TFD Industrial Estate, Moo 5 Tambon Thasa-an Amphur, Bang Pakong, Chacheongsao Province 24130 Thailand Tel: +66 38 578 512-4 Fax: +66 38 578 520 E-mail: enquiry@xetera.asia

Can Decorating Equipment



Intercan Group Ltd

38 Burners Lane, Kiln Farm, Milton Keynes , MK11 3HB, UK Tel: +44 1908 270041 Fax: +44 1908 270043 E-mail: sales@intercan.co.uk Web: www.intercan.co.uk

Can & Double Seam Testing Equipment

CMC-KUHNKE, Inc 1060 Broadway, Albany NY 12204, USA Tel: +1 518 694 3310 Fax: +1 518 694 3311 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com

CMC-KUHNKE, GmbH Colditzstr. 34-36, Bau 18 D-12099 Berlin, Germany Tel: +49 30 2300 660 Fax: +49 30 2300 6666 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com

Can End Dies



Amador Varas SA Amador Varas SA c/Montalegre 32 08915 Badalona, Barcelona, Spain Tel: +34 933 952 954 Fax: +34 933 954 904 E-mail: varas@amador-varas.com Web: www.amador-varas.com



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows, IL 60008, USA Tel: +1 847 394 5810 Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com

Can Line Control Systems



Automation & Drives

KON-TEK Automation 405 Street N:8 Pinarbai Izmir, Turkey Tel: +90 232 479 10 10 pbx Fax: +90 232 479 91 91 E-mail: kontek@kontekotomasyon. com.tr Web: www.kontekotomasyon.com.tr



Roeslein & Associates Inc 9200 Watson Road, Suite 200 St Louis, MO 63126-1528, USA Tel: +1 314 729 0055 Fax: +1 314 729 0070 E-mail: sales@roeslein.com Web: www.roeslein.com

Can Making Machines and Complete Lines



Lin Der Sheng Can Making Machinery Co Ltd

No.135, Puu-ne street, Yen-her Li Chang Hua City, Taiwan, ROC Tel: +886 4 7118143 Fax: +886 4 7116487 Web: http:/can-making.com E-mail: s7228143@ms19.hinet.net



Sargiani SpA Via Farnesiana 84 29100 Piacenza, Italy Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com



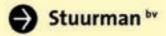
Shin-I Machinery Works Co Ltd No 43 Chung Cheng St Chingshui , Taichung Taiwan ROC Tel: +886 4 2623 8181

Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Soudronic

Soudronic AG

Industriestrasse 35 CH-8962 Bergdietikon Switzerland Tel: +41 44 743 66 66 Fax: +41 44 743 66 99 E-mail: info@soudronic.com Web: www.soudronic.com



Stuurman BV PO Box 35 1520 AA Wormerveer The Netherlands Tel: +31 75 6283551 Fax: +31 75 6286037 E-mail: info@stuurmanbv.com Web: www.stuurmanbv.com



SWISSCAN Network

Muelisacker 221 CH-5705 Hallwil Switzerland Tel: +41 62 777 44 40 Fax: +41 62 777 44 41 E-mail: box@swisscan.net Web: www.swisscan.net

Can Seamer Manufacturer



Varin Food Machinery Co Ltd 57/22 Moo 5, Soi Thamsiri, Bangna-Trad Rd KM 26 T Bangsaothong A Bangsaothong, Samutprakarn 10540 Thailand Tel: +662 708 5522 Fax: +662 708 5528 E-mail: preecha@varinfood.com Web: www.varinfood.com

Can Testing Equipment



BA.SCO srl Via Borgognone 9 10090 Trana (Torino) Italy Tel: +39 0119 33620 Fax: +39 0119 355 763 E-mail: sales@basco-testers.com Web: www.basco-testers.com



Bonfiglioli Engineering SpA

Via Rondona 33 44049 Vigarano Pieve Ferrara, Italy Tel: +39 0532 715 631 Fax: +39 0532 715 625 E-mail: info@bonfiglioliengineering.com Web: www.bonfiglioliengineering.com



CMC-KUHNKE, Inc 1060 Broadway Albany, NY 12204, USA Tel: +1 518 694 3310 Fax: +1 518 694 3311 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com CMC-KUHNKE, GmbH Colditzstr. 34-36, Bau 18 D-12099 Berlin, Germany Tel: +49 30 2300 660 Fax: +49 30 2300 6666 E-mail: info@cmc-kuhnke.com



InnoScan K/S Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk Web: www.innoscan.dk



North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk Europe (3-Piece) English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 F-mail: info@sencon.eu Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia Web: www.sencon.com

To advertise, contact Victoria Deakins on +44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com

Can Testing Equipment



Trac Measurement Systems Limited Trac House, Nedge Hill Science Park Telford TF3 3AJ, UK Tel: +44 1952 210020 Fax: +44 1952 299804 Email: tms.sales@trac-group.com Web: www.trac-group.com



Versatile Technology 2 Industrial Avenue Notting Hill Victoria 3168, Australia Tel: +61 3 9548 8983 Fax: +61 3 9548 8958 E-mail: contact@versatiletechnology. com.au Web: www.versatiletechnology.com.au



Wilco AG Rigackerstr 11

CH-5610 Wohlen, Switzerland Tel: + 41 56 618 4343 Fax: +41 56 618 4344 E-mail: info@wilco.com Web: www.wilco.com

Can Tooling Services

SEAL PRECISION

Seal Precision Co Ltd

57/33 Moo 5, Soi Thamsiri Bangna-Trad Rd KM 26, T Bangsaothong A Bangsaothong, Samutprakarn 10540, Thailand Tel: +662 708 5585 Fax: +662 708 5755 E-mail: kanok@varinfood.com Web: www.varinfood.com

Can Trimmers

Belvac Production Machinery, Inc.

Belvac Production Machinery Inc 237 Graves Mill Road Lynchburg, VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



CarnaudMetalbox Engineering plc Dockfield Road Shipley, West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com

Can Washer Holdown Mats & Belts



 Ashworth Bros, Inc

 450 Armour Dale

 Winchester, VA 22601, USA

 Tel: +1 540 662 3494

 Fax: +1 540 662 3150

 E-mail: ashworth@ashworth.com

 Web: www.ashworth.com

Can Washers/Ovens



Worldwide Headquarters: International Thermal Systems LLC 4697 W Greenfield Avenue Milwaukee, WI 53214, USA Tel: +1 414 672 7700 Fax: +1 414 672 8800 E-mail: matt.wingert@itsllcusa.com Web: www.itsllcusa.com

European Office: International Thermal Systems Ltd

11 Ham Common, Richmond London TW107JB, UK Tel: +44 7900 191 352 E-mail: david.reeve@itsllcusa.com Asian Office:

ITS Industrial Thermal Equipment Co Ltd Tel: +86 21 6774 1033 Fax: +86 21 6774 2860 E-mail: matt.wingert@itsllcusa.com





VMI Holland BV Gelriaweg 16

8161 RK Epe The Netherlands Tel: +31 578 679 111 Fax: +31 578 621 317 E-mail: sales@vmi-group.com Web: www.vmi-group.com



Cincinnati Industrial Machinery 4600 N Mason-Montgomery Road Mason, OH 45040, USA TF Phone: (800) 677-0076 Tel: +1 513 923 5601 Fax: +1 513 923 5694 E-mail: sales@cinind.com Web: www.cinind.com

Capping Machines



Sommetrade SL

Parque Tecnologico de Zamudio -Edificio 301 48170 Zamudio (Vizcaya), Spain Tel: +34 94 431 8611 Fax: +34 94 431 8200 E-mail: j.vivanco@sommetrade.com Web: www.sommetrade.com

Cap Making Machines



Alfons Haar Alfons Haar Maschinenbau GmbH & Co KG

Fangdieckstraße 67 22547 Hamburg Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de Alfons Haar Inc 150 Advanced Drive Sprinaboro Ohio 45066, USA Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us Alfons Haar Maschinenbau GmbH & Co KG Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows IL 60008, USA Tel: +1 847 394 5810 Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com



Bortolin Kemo SpA

Corso Lino Zanussi 34/b 33080 Porcia (PN) Italy Tel: +39 0434 922 010 Fax: +39 0434 921 733 E-mail: info@bortolinkemo.com Web: www.bortolinkemo.com



Cantec GmbH & Co KG

Helenenstrasse 149 D-45143 Essen Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com

Ceramic Can & End Tooling



LPT – Lieb Precision Tool, Inc 1819 South Murray Blvd. Colorado Springs CO 80916, USA Tel: +1 719 355 2600 Fax: +1 719 596 3019 Operation Manager: Mike Simonson E-mail: mikes@liebpt.com sales@liebpt.com Web: www.liebpt.com



SOLUTIONS IN HARD MATERIALS

 Waliram GmbH

 Schuermannstrasse 40

 45136 Essen

 Germany

 Tel: +49 201 89 63 660

 Fax: +49 201 89 63 630

 E-mail: sales@wallram.de

 Web: www.wallram.de

Buyers guide

Coating Machines



Crabtree of Gateshead Ltd Kingsway, Team Valley Trading Estate Gateshead, Tyne & Wear NE11 0SU, UK Tel: +44 191 487 5071 Fax: +44 191 487 3997 E-mail: sales@crabpress.co.uk Web: www.crabpress.co.uk



Hebenstreit Metal Decorating GmbH

Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim, Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de



KBA-MetalPrint GmbH Wernerstr. 119-129 D-70435 Stuttgart, Germany Tel: +49 711 69971-0 Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de



Lance Machinery Co Ltd No 640-1, Sec 2, Jhanghe Rd Hemei Township Changhua County 508, Taiwan Tel: +886 4736 1632 Fax: +886 4736 1693 E-mail: lance.coater@msa.hinet.net Web: www.lancecoater.com



Miotto Este Via Talamoni 4 I-20047 Brugherio (MI), Italy Tel: +39 0392 878 284 Fax: +39 0398 84594 E-mail: info@miottoeste.it Web: www.miottoeste.it

Coating Machines Bottom Rim



Belvac Production Machinery Inc 237 Graves Mill Road Lynchburg VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com

Coatings, Lacquers, Varnishes



AkzoNobel Packaging Coatings ASIA PACIFIC Tel: +86 21 5774 5700 Ext. 3280 Fax: +86 21 3352 8503 E-mail: tony.greensall@akzonobel.com EUROPE Tel: +33 232 96 43 03 Fax: +33 2 35 78 38 20

E-mail: emmanuel. bareaud@akzonobel.com NORTH AMERICA

Tel: +1 440 297 5603 Fax: +1 440 297 5549 E-mail: william.gray@akzonobel.com **SOUTH AMERICA: Akzo Nobel Ltda** Av.dos Estados, 4826 09220-900 Santo Andre - SP Brazil Tel: +55 11 4463 9052 Fax: +55 11 4463 9053 E-mail: packaging.sa@akzonobel.com



Internorm Kunststofftechnik GmbH Robert-Bosch-Str 5 49401 Damme Germany Tel: +49 5491 9691-0 Fax: +49 5491 9691-10 E-mail: info@internorm.de Web: www.internorm.de



Schekolin AG

Industriestrasse 3 FL 9487 Gamprin-Bendern Principality of Liechtenstein Tel. +423 375 75 75 Fax +423 375 75 76 E-mail: info@schekolin.com Web: www.schekolin.com

valspar

North America: The Valspar

Corporation Packaging Coatings Group 2001 Tracy Street Pittsburgh, PA 15233, USA Tel: +1 412 766 9300 Fax: +1 412 766 4517 Web: www.valsparpackaging.com E-mail: packaging@valspar.com South America: The Valspar **Corporation Ltda** Estrada dos Casa, 5050 Bairro Alvarenga São Bernardo do Campo SP 09840-900, Brazil Tel: +55 11 4358 9224 Fax: +55 11 4358 9228 Europe: The Valspar (Switzerland) Corporation AG Industriesstrasse 9, CH-8627 Gruningen, Switzerland Tel: +41 44 936 7777 Fax: +41 44 936 7778

Asia: The Valspar (Singapore) Corporation Pte Ltd 6 Tuas Avenue 8 639221 Singapore Tel: +65 6862 0261 Fax: +65 6862 0186

Coil Handling Systems



ASC Machine Tools Inc 900 N Fancher Road Spokane, WA 99212, USA Tel: +1 509 534 6600 Fax: +1 509 536 7658 E-mail: sales@ascmt.com Web: www.ascmt.com



Hengli CNC Technology Co, Ltd 9 Huishan Road, Mogan Mountain Economic Development Zone, Deqing, Zhejiang Province, China 313200 Tel: +86 572 8832016 +86 572 8832000 Fax: +86 572 8832222 E-mail: info@zjhlcnc.net Web: www.zjhlcnc.com



LITTELL, LLC 1211 Tower Road Schaumburg, IL 60173, USA Tel: +1 630 622 4700 Fax: +1 630 622 4747 E-mail: info@littell.com Web: www.littell.com

Complete Can Lines (Three-Piece)



Gebrüder Leonhardt GmbH & Co KG Blema Kircheis Erdmann-Kircheis-Strasse 13-15 D-08280 Aue, Germany Tel: +49 3771 278 221 Fax: +49 3771 278 241 E-mail: blema@t-online.de Web: www.blema.de



Cantec GmbH & Co KG Helenenstrasse 149 D-45143 Essen Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com

Complete Can Lines (Three-Piece)



Lanico Maschinenbau Otto Niemsch GmbH

PO Box 3065 D-38020 Braunschweig, Germany Tel: +49 531 809 060 Fax: +49 531 809 0627 E-mail: info@lanico.de Web: www.lanico.de



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St , Chingshui Taichung, Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Soudronic

Soudronic AG Industriestrasse 35 CH-8962 Bergdietikon Switzerland Tel: +41 44 743 66 66 Fax: +41 44 743 66 99 E-mail: info@soudronic.com Web: www.soudronic.com

To advertise, contact Victoria Deakins on +44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com

Complete Can Lines (Three-Piece)



SWISSCAN Network Muelisacker 221 CH-5705 Hallwil Switzerland Tel: +41 62 777 44 40 Fax: +41 62 777 44 41 E-mail: box@swisscan.net Web: www.swisscan.net

Complete Can Making Lines (Three-Piece) – Used



Container Fabrication Machinery 2216 E Miner Avenue Stockton CA 95205, USA Tel: +1 209 469 7384 Fax: +1 209 469 4826 E-mail: sales@canmaking.net Web: www.canmaking.net

Complete Can Lines (Two-Piece)



Alfons Haar Alfons Haar Maschinenbau GmbH & Co KG

Fangdieckstraße 67 22547 Hamburg, Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de Alfons Haar Inc 150 Advanced Drive

Springboro, Ohio 45066, USA Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us

Alfons Haar Maschinenbau GmbH & Co KG

Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



Cantec GmbH & Co KG Helenenstrasse 149 D-45143 Essen, Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com



engineers - Manufacturers - constructor Roeslein & Associates Inc 9200 Watson Road, Suite 200 St Louis

MO 63126-1528, USA Tel: +1 314 729 0055 Fax: +1 314 729 0070 E-mail: sales@roeslein.com Web: www.roeslein.com

Complete Can Making Lines (Two-Piece) - Used



Container Fabrication Machinery 2216 E Miner Avenue Stockton CA 95205, USA Tel: +1 209 469 7384 Fax: +1 209 469 4826 E-mail: sales@canmaking.net Web: www.canmaking.net

Complete End-Making Lines



Alfons Haar Alfons Haar Maschinenbau GmbH & Co KG Fangdieckstraße 67

22547 Hamburg Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de **Alfons Haar Inc**

150 Advanced Drive Springboro

Ohio 45066, USA Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us

Alfons Haar Maschinenbau GmbH & Co KG

Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



Gebruder Leonhardt GmbH & Co KG Blema Kircheis

Erdmann-Kircheis-Strasse 13-15 D-08280 Aue, Germany Tel: +49 3771 278 221 Fax: +49 3771 278 241 E-mail: blema@t-online.de Web: www.blema.de



Cantec GmbH & Co KG

Helenenstrasse 149 D-45143 Essen, Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



engineering GmbH

Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo, Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com



UPDMARK HACHINES AND PLANES DR HETAL LAN HAMINACTURNES

Sargiani SpA Via Farnesiana 84 29100 Piacenza, Italy Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St Chingshui, Taichung, Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com.

Complete End-Making Lines – Used

CONTAINER PAREICATION MACHINERY

Container Fabrication Machinery 2216 E Miner Avenue, Stockton CA 95205, USA Tel: +1 209 469 7384 Fax: +1 209 469 4826 E-mail: sales@canmaking.net Web: www.canmaking.net



Worldwide Headquarters:

International Thermal Systems LLC 4697 W Greenfield Avenue Milwaukee, WI 53214, USA Tel: +1 414 672 7700 Fax: +1 414 672 8800 E-mail: matt.wingert@itsllcusa.com Web: www.itsllcusa.com European Office: International Thermal Systems Ltd 11 Ham Common, Richmond London TW10 7JB, UK

Tel: +44 7900 191 352 E-mail: david.reeve@itsllcusa.com Asian Office:

ITS Industrial Thermal Equipment Co Ltd Tel: +86 21 6774 1033 Fax: +86 21 6774 2860 E-mail: matt.wingert@itsllcusa.com

Container Presses



HEILBRONN Container Presses Ltd

Wannenäckerstr 36 74078 Heilbronn, Germany Tel.: +49 7131 296 82 Fax: +49 7131 296 64 E-mail:j.mezger@heilbronn-service.com Web: www.heilbronn-container.com



Web:www.actega.com E-mail: info.ACTEGA@altana.com ACTEGA Artistica World Headquarters: P. Empresarial A GRANXA, Rua F, 36475 Porrino, Spain

Tel: +34 986 231606 Fax: +34 986 210774 North America:

1050 Taylors Lane Cinnamminsson NJ, USA Tel: +1 856 829 6300 Ext: 4032 Cell: +1 609 351 8156



Enriching Lives, Everywhere

World Headquarters

Fax: +1 856 829 6940

W. R. Grace & Co. - Conn 7500 Grace Drive, Columbia MD 21044, USA Tel: +1 410 531 4000 Tel: +1 800 638 6014

Buyers guide

Grace Davison Materials & Packaging Technologies

62 Whittemore Ave, Cambridge MA 02140, USA Tel: +1 617 498 4987

Latin America Grace Brazil Ltda Rua Albion, 229-10 Andor CJ101 Lapa, Sao Paulo AP/Brasil 05077-130 Tel: +55 113649 2704

Asia Pacific

W.R. Grace (Hong Kong) Ltd 1010 Huai Hai Zhong Shanghai 200031, China Tel: +86 2154678 **Europe**

Grace GmbH & Co. KG In der Hollerecke 1 67547 Worms, Germany Tel: +49 6241 403.00 www.grace.com

Conveyors: Magnetic

BUNTING Magnetics Co.

 Bunting Magnetics Co

 500 S Spencer Avenue

 PO Box 468, Newton

 KS 67114-0468, USA

 Tel: +1 316 284 2020

 Fax: +1 316 283 4975

 E-mail: bmc@buntingmagnetics.com

 Web: www.buntingmagnetics.com

Fleetwood Calde Wyard

FleetwoodGoldcoWyard 1305 Lakeview Drive Romeoville, IL 60446, USA Tel: +1 630 759 6800 Fax: +1 630 759 2299 E-mail: sales@fgwa.com Web: www.fgwa.com

COUDSUIT

magnetic systems

Goudsmit Magnetic Systems B.V.

PO Box 18, Petunialaan 19 NL-5580 AA Waalre, The Netherlands Tel: +31 40221 3283 Fax: +31 40221 7325 E-mail: info@goudsmit-magnetics.nl Web: www.goudsmit-magnetics.nl

Conveyors: Plastic Belting & Chain



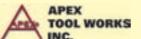
Ashworth Bros, Inc 450 Armour Dale Winchester, VA 22601, USA Tel: +1 540 662 3494 Fax: +1 540 662 3150 E-mail: ashworth@ashworth.com Web: www.ashworth.com

Copper Welding Wire

sims copperQ

Sims Copper P2123 Precinct 2, Jalan FZ1-P2 Port Klang Free Zone/KS 42920 Pulau Indah Selangor, Malaysia Tel: +603 6205 4588 Fax: +603 6205 4688 Mobile: +6016 550 0844 / +6016 710 0844 E-mail: info@simscopper.com Web: www.simscopper.com

Curler Tooling



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows IL 60008, USA Tel: +1 847 394 5810

Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com

D&I Canmaking Systems



Schuler Pressen GmbH Bahnhofstrasse 41 73033 Göppingen, Germany Tel: +49 7161 66 540 Fax: +49 7161 66 659 E-mail: info@schulergroup.com Web: www.schulergroup.com

D&I Can Tooling



International Container Supply

Customer Service – USA 7333 Paragon Road, St 100 Centerville, OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net

Customer Service – China Tel: +86 137 05 288211

E-mail: gyao@icstrading.net **Customer Service – Mexico** Tel: +52 5555 779087 E-mail: ramador@icstrading.net **Customer Service – Thailand** Tel: +66 86 558 3033 E-mail: chot11000@gmail.com



LPT – Lieb Precision Tool, Inc 1819 South Murray Blvd. Colorado Springs CO 80916, USA Tel: +1 719 355 2600 Fax: +1 719 596 3019 Operation Manager: Mike Simonson E-mail: mikes@liebpt.com sales@liebpt.com



SOLUTIONS IN HARD MATERIALS

Schuermannstrasse 40 45136 Essen, Germany Tel: +49 201 89 63 660 Fax: +49 201 89 63 630 E-mail: sales@wallram.de Web: www.wallram.de

D&I Cup Tooling



International Container Supply

Customer Service – USA 7333 Paragon Road, St 100 Centerville, OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net Customer Service – China Tel: +86 137 05 288211 E-mail: gyao@icstrading.net Customer Service – Mexico Tel: +52 5555 779087 E-mail: ramador@icstrading.net

Customer Service – Thailand Tel: +66 86 558 3033 E-mail: chot11000@gmail.com

WALLRAM

SOLUTIONS IN HARD MATERIALS

Wallram GmbH

Schuermannstrasse 40 45136 Essen, Germany Tel: +49 201 89 63 660 Fax: +49 201 89 63 630 E-mail: sales@wallram.de Web: www.wallram.de

Decorators for 2-piece Beverage



UnimaQ Ltd

Unit 2, Pinfold Lane Llay South Industrial Estate Llay, Wrexham LL12 OPX, UK Tel: +44 1978 855 558 Fax: +44 1978 855 573 Mobile: (+44) 7720 468 309 E-mail: enquiries@unimaq.co.uk Web: www.unimaq.co.uk

Design Engineering & Installation



NDH Group

Grosvenor Business Tower TECOM C, 15th Floor, Office # 1503, Dubai, United Arab Emirates PO Box 450477, Dubai, UAE Tel: +971 4 4347225 Fax: +971 4 4347226 E-mail : info@ndhgroup.com Web: www.ndhgroup.com

Domers/Bottom Formers



Pride Engineering, Inc 9401 73rd Avenue North, Suite 200 Minneapolis, MN 55428, USA E-mail: brucea@pridecan.com Web: www.pridecan.com

Domers & Dome Stations



ENGINEERING

CarnaudMetalbox Engineering plc

Dockfield Road, Shipley West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com

Double Sheet Detection

SENCON

Sencon North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com **Europe, Middle East, Asia** Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Double Sheet Detection

Europe (3-Piece)

English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu **Asia (3-Piece)** English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia

Web: www.sencon.com

DRD Can Making Equipment



RAINER NAROSKA engineering GmbH

Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com

DRD Can Making Equipment



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St, Chingshui Taichung Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Drying Ovens



Hebenstreit Metal Decorating GmbH Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim, Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de

KBA-MetalPrint

KBA-MetalPrint GmbH Wernerstr. 119-129 D-70435 Stuttgart Germany Tel: +49 71169971-0 Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de



Miotto Este Via Talamoni 4 I-20047 Brugherio (MI), Italy Tel: +39 0392 878 284 Fax: +39 0398 84594 E-mail: info@miottoeste.it Web: www.miottoeste.it

sellacan

sellacan Industrieofen GmbH Daimlerstr 12 D-32791 Lagr, Germany Tel: +49 5232 69900

Fax: +49 5232 699028 E-mail: info@sellacan.de Web: www.sellacan.de

Easy Open End Manufacturing Machinery

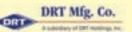


Alfons Haar Alfons Haar Maschinenbau GmbH &

CoKG Fangdieckstraße 67 22547 Hamburg Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de Alfons Haar Inc 150 Advanced Drive

Springboro Ohio 45066, USA Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us Alfons Haar Maschinenbau GmbH & Co KG

Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



DRT Mfg. Co. 618 Greenmount Blvd

Dayton OH 45419, USA Tel: +1 937 298 7391 Fax: +1 937 298 7190 E-mail: postoffice@drtusa.com Web: www.drtmfgco.com

Easy Open Ends



DivFood – A Division of Nampak Products Ltd

25 Richard Carte Road Mobeni, Kwazulu-Natal South Africa Tel: +27 31 450 5874 Fax: +27 31 450 5882 E-mail: sajid.madhanlala@za.nampak.

Web: www.nampak.com



Global Ends SA

Poligono Industrial de Ceuti C /Rio Mundo 3 E-30562 Ceuti (Murcia), Spain Tel: +34 968 687 840 Fax: +34 968 687 684 E-mail: globalends@globalends.com Web: www.globalends.com



MIVISA Envases SAU Poligono Industrial Los Pinos 30565 Las Torres de Cotillas Murcia, Spain Tel:+34 968 364400 Fax: +34 968 364442 E-mail: mivisa@mivisa.com Web: www.mivisa.com

Easy Open End Repair Coat System



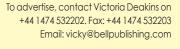
Daimlerstr 12 D-32791 Lage Germany Tel: +49 5232 69900 Fax: +49 5232 699028 E-mail: info@sellacan.de Web: www.sellacan.de

Easy Open End Testing Equipment



Bonfiglioli Engineering SpA

Via Rondona 33 44049 Vigarano Pieve Ferrara, Italy Tel: +39 0532 715 631 Fax: +39 0532 715 625 E-mail: info@bonfiglioliengineering.com Web: www.bonfiglioliengineering.com





InnoScan K/S Sødalsparken 11 8220 Brabrand Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk

SENCON

North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com

Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Europe (3-Piece) English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +6326966965 Fax: +6326966159 E-mail: info@sencon.asia Web: www.sencon.com

Easy Open & Peel-off Membrane Ends

PARLIAMENT INTERNATIONAL LTD.

Parliament International Ltd

Cervantes House 5-9 Headstone Road Harrow Middlesex HA1 1PD, UK Tel: +44 20 8861 3505 Fax: +44 20 8861 2025 E-mail: david.munk@parliament-group.co.uk Web: www.parliament-group.co.uk

End Bags, Kraft



Stonehouse Paper & Bag Mills Ltd Lower Mills Stonehouse Glos GL10 2BD, UK Tel: +44 1453 822173 Fax: +44 1453 822174

E-mail: stonehousepaper@aol.com

End Compound Liners



CarnaudMetalbox Engineering plc Dockfield Road, Shipley W Yorkshire BD177AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com



Enriching Lives, Everywhere."

World Headquarters W. R. Grace & Co. - Conn 7500 Grace Drive Columbia, MD 21044, USA Tel: +1 410 531 4000 Tel: +1 800 638 6014

Grace Davison Materials & Packaging Technologies 62 Whittemore Ave Cambridge, MA 02140, USA Tel: +1 617 498 4987 Latin America Grace Brazil Ltda

Rua Albion, 229-10 Andor CJ101 Lapa, Sao Paulo AP/Brasil 05077-130 Tel: +55 113649 2704 Asia Pacific

W.R. Grace (Hong Kong) Ltd 1010 Huai Hai Zhong Shanghai 200031, China Tel: +86 2154678

Europe

Grace GmbH & Co. KG In der Hollerecke 1 67547 Worms, Germany Tel: +49 6241 403.00 www.grace.com

End Line Balancers & Balancer Trays



Clevertech Industrial Automation Via Brodolini 18/A 42020 Cadelbosco (RE), Italy Tel: +39 0522 911 330 Fax: +39 0522 911 201 E-mail: info@clevertech.it Web: www.clevertech.it

Fleetwood Calde Wyard

FleetwoodGoldcoWyard 1305 Lakeview Drive Romeoville, IL 60446, USA Tel: +1 630 759 6800 Fax: +1 630 759 2299 E-mail: sales@fgwa.com Web: www.fgwa.com

End Roll Palletizers & Depalletizers



Clevertech Industrial Automation Via Brodolini 18/A 42020 Cadelbosco (RE), Italy Tel: +39 0522 911 330 Fax: +39 0522 911 201 E-mail: info@clevertech.it Web: www.clevertech.it

Fleetwood Galice Wyard

 FleetwoodGoldcoWyard

 1305 Lakeview Drive

 Romeoville, IL 60446, USA

 Tel: +1 630 759 6800

 Fax: +1 630 759 2299

 E-mail: sales@fgwa.com

 Web: www.fgwa.com

End & Tab Conversion Tooling



DRT Mfg. Co.

618 Greenmount Blvd Dayton, OH 45419, USA Tel: +1 937 298 7391 Fax: +1 937 298 7190 E-mail: postoffice@drtusa.com Web: www.drtmfgco.com



DRT GmbH & Co KG Hansestrasse 49 D-38112 Braunschweig, Germany Tel: +49 531 231 620 Fax: +49 531 231 6244 E-mail: info@drt-europe.de Web: www.drt-europe.de



Adena Tool Corporation

4201 Little York Road Dayton, OH 45414, USA Tel: +1 937 890 8428 Fax: +1 937 890 0723 E-mail: sales@adenatool.com Web: www.adenatool.com



International Container Supply Customer Service – USA

7333 Paragon Road, St 100 Centerville, OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net

Customer Service – China

Tel: +86 137 05 288211 E-mail: gyao@icstrading.net **Customer Service – Mexico** Tel: +52 5555 779087 E-mail: ramador@icstrading.net **Customer Service – Thailand** Tel: +66 86 558 3033 E-mail: chot11000@gmail.com



Micromec Srl

Via Palermo 37 20090 Assago (MI), Italy Tel: +39 02 488 8611 Fax: +39 02 488 86133 E-mail: staff@micromec.com Web: www.micromec.com

End Testing Equipment



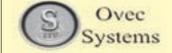
CMC-KUHNKE, Inc 1060 Broadway Albany, NY 12204, USA Tel: +1 518 694 3310 Fax: +1 518 694 3311 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com CMC-KUHNKE GmbH

Colditzstr. 34-36, Bau 18 D-12099 Berlin, Germany Tel: +49 30 2300 660 Fax: +49 30 2300 6666 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com

End Testing Equipment



Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk Web: www.innoscan.dk



Ovec Systems Ltd 5 Brown Street, Coatbridge North Lanarkshire ML5 4AS Scotland Tel: +44 1236 710680 Fax: +44 1236 710747 E-mail: info@ovec.co.uk Web: www.ovec.co.uk

SENCON

North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800

Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Europe (3-Piece) English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87

E-mail: info@sencon.eu Asia (3-Piece)

English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia Web: www.sencon.com

End Wrapping/Unwrapping



Clevertech Industrial Automation Via Brodolini 18/A 42020 Cadelbosco (RE), Italy Tel: +39 0522 911 330 Fax: +39 0522 911 201 E-mail: info@clevertech.it Web: www.clevertech.it

Fleetwood GaldsoWyard

FleetwoodGoldcoWyard 1305 Lakeview Drive Romeoville, IL 60446 , USA

Tel: +1 630 759 6800 Fax: +1 630 759 2299 E-mail: sales@fgwa.com Web: www.fgwa.com



CSW Machinery BV Rigastraat 167418 EW Deventer P.O. Box 810, 7400 AV Deventer The Netherlands Tel: +31 570 678 700 Fax: +31 570 633 985 E-mail: sales@cswbv.nl

Engineering & Installation Services



Roeslein & Associates Inc. 9200 Watson Road, Suite 200 StLouis, MO 63126-1528, USA Tel: +1 314 729 0055 Fax: +1 314 729 0070 E-mail: sales@roeslein.com Web: www.roeslein.com

Buyers guide

Flanging Machines

Belvac Production Machinery, Inc.

Belvac Production Machinery Inc 237 Graves Mill Road Lynchburg, VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



Germann + Frei AG Martinsbruggstrasse 92 CH-9016 St. Gallen Switzerland Tel: +41 71 282 16 40 Fax: +41 71 282 16 50 E-mail: info@germannfrei.ch Web: www.germannfrei.ch



Lanico Maschinenbau Otto Niemsch GmbH

PO Box 3065 D-38020 Braunschweig, Germany Tel: +49 531 809 060 Fax: +49 531 809 0627 E-mail: info@lanico.de Web: www.lanico.de



Ruey I Machinery Co Ltd No 173 Sec 1 Kong Pu Road Wu Chi District Taichung 435, Taiwan Tel: +886 4 2639 7261-2 Fax: +886 4 2639 7263 E-mail: rueyi@ms42.hinet.net Web: www.rueyi.com.tw

General Machining



T&G Engineering Co Unit 1, 14 Camphill Industrial Estate Camphill Road, West Byfleet, Surrey KT14 6EW, UK Tel: +44 1932 353 228 Fax: +44 1932 349 692 Mobile: +44 0 7951 156 870 E-mail : tony@tgengineering.co.uk Web : www.tgengineering.co.uk

Induction Curing & Drying Systems



Can Man Aktiengesellschaft Mülisacker 221 CH-5705 Hallwil, Switzerland Tel: +41 62 777 4440 Fax: +41 62 777 4441 E-mail: sales@canman.ch Web: www.canman.ch Member of SWISSCAN Network Web: www.swisscan.net



Sprimag Spritzmaschinenbau GmbH & Co KG Henriettenstrasse 90 73230 Kirchheim/Teck Germany Tel: +49 7021 5790 Fax: +49 7021 417 60 E-mail: packtech@sprimag.de Web: www.sprimag.de

Inside Spray Control

DENLUR

North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Europe (3-Piece) English, Español Tel: +34 937 54 95 26

Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia Web: www.sencon.com

Inside/Outside Spray Machines

CARNAUDMETALBOX

ENGINEERING

CarnaudMetalbox Engineering plc Dockfield Road Shipley, West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com



Sprimag Spritzmaschinenbau GmbH & Co KG Henriettenstrasse 90 73230 Kirchheim/Teck Germany Tel: +49 7021 5790 Fax: +49 7021 417 60 E-mail: packtech@sprimag.de

Inspection Systems

Web: www.sprimag.de



ALTEK Company 245 East Elm Street PO Box 1128 Torrington CT 06790, USA Tel: +1 860 482 7628 Fax: +1 860 496 0255 E-mail: tech@altekcompany.com Web: www.altekcompany.com



Applied Vision Corporation

2020 Vision Lane Akron, OH 44223, USA Tel: +1 330 926 2222 Fax: +1 330 926 2250 E-mail: sales@appliedvision.com Web: www.appliedvision.com



Belvac Production Machinery Inc 237 Graves Mill Road Lynchburg, VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



CMC-KUHNKE, Inc

1060 Broadway Albany, NY 12204, USA Tel: +1 518 694 3310 Fax: +1 518 694 3311 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com **CMC-KUHNKE, GmbH** Colditzstr. 34-36, Bau 18 D-12099 Berlin, Germany

D-12099 Berlin, Germany Tel: +49 30 2300 660 Fax: +49 30 2300 6666 E-mail: info@cmc-kuhnke.com Web: www.cmc-kuhnke.com To advertise, contact Victoria Deakins on +44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com

ibea

ibea GmbH Kleine Bahnstrasse 8 D-22525 Hamburg, Germany Tel: +49 40 6898 870 Fax: +49 40 6898 8729 E-mail: info@ibea.de Web: www.ibea.de



InnoScan K/S Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk



Pressco Technology Inc 29200 Aurora Road Cleveland, OH 44139, USA Tel: +1 440 498 2600 Fax: +1 440 498 2615 E-mail: sales@pressco.com

Web: www.pressco.com

SENCON

Sencon North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk Europe (3-Piece) English, Español Tel: +34 937 54 95 26 Francais Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +6326966159

Fax: +63 2 696 6159 E-mail: info@sencon.asia **Web: www.sencon.com**

Leak Detection



Bonfiglioli Engineering SpA Via Rondona 33 44049 Vigarano Pieve Ferrara, Italy Tel: +39 0532 715 631 Fax: +39 0532 715 625 E-mail: info@bonfiglioliengineering.com Web: www.bonfiglioliengineering.com

Buyers guide



InnoScan K/S Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk Web: www.innoscan.dk



Wilco AG Rigackerstr 11 CH-5610 Wohlen Switzerland Tel: + 41 56 618 4343 Fax: +41 56 618 4344 E-mail: info@wilco.com Web: www.wilco.com

Leak Testers



ibea GmbH Kleine Bahnstrasse 8 D-22525 Hamburg, Germany Tel: +49 40 6898 870 Fax: +49 40 6898 8729 E-mail: info@ibea.de Web: www.ibea.de



InnoScan K/S Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk Web: www.innoscan.dk



Sencon

North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia

Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu **Asia (3-Piece)** English Tel: +63 2 696 6965

Fax: +63 2 696 6159 E-mail: info@sencon.asia **Web: www.sencon.com**

Light Testers



Belvac Production Machinery Inc 237 Graves Mill Road , Lynchburg VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



InnoScan K/S Sødalsparken 11 8220 Brabrand, Denmark Tel +45 86 26 5677 Fax +45 86 26 5678 E-mail: innoscan@innoscan.dk

SENCON

Sencon North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk Europe (3-Piece)

English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +6326966965 Fax: +6326966159 E-mail: info@sencon.asia **Web: www.sencon.com**

Line Installation & Maintenance



LITTELL, LLC 1211 Tower Road Schaumburg IL 60173, USA Tel: +1 630 622 4700 Fax: +1 630 622 4747 E-mail: info@littell.com Web: www.littell.com

Lubrication Technology



Chemtool Incorporated Container Technology Group 8200 Ridgefield Road, PO Box 538 Crystal Lake, IL 60039-0538, USA Call Today! Bob Mack or Mike Winters Tel: +1 815 459 1250 Fax: +1 815 459 1255 E-mail: ctg@chemtool.com Web: www.chemtool.com/ctg

Lug Cap Manufacturing Lines



Alfons Haar Alfons Haar Maschinenbau GmbH &

Co KG Fangdieckstraße 67 22547 Hamburg, Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de Alfons Haar Inc 150 Advanced Drive Springboro, Ohio 45066, USA

Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us Alfons Haar Maschinenbau GmbH & Co KG Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows IL 60008, USA Tel: +1 847 394 5810 Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com



Cantec GmbH & Co KG Helenenstrasse 149 D-45143 Essen, Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo, Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com



THE WETAG LARN MANUFACTURING

Sargiani SpA

Via Farnesiana 84 29100 Piacenza,Italy Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St Chingshui, Taichung, Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Magnetic Decorator Cylinders

BUNTING Magnetics Co.

 Bunting Magnetics Co

 500 S. Spencer Avenue

 PO Box 468, Newton

 KS 67114-0468, USA

 Tel: +1 316 284 2020

 Fax: +1 316 283 4975

 E-mail: bmc@buntingmagnetics.com

 Web: www.buntingmagnetics.com



T. D. Wright Inc 292 Walnut Street, St Paul MN 55102, USA Tel: +1 651 227 1302 Fax: +1 651 227 4465 E-mail: cstrauch@tdwinc.com Web: www.tdwright.com

Metal Decorating Equipment



CarnaudMetalbox Engineering plc Dockfield Road, Shipley West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com



Crabtree of Gateshead Ltd Kinasway

Team Valley Trading Estate Gateshead, Tyne & Wear NE11 0SU, UK Tel: +44 191 487 5071 Fax: +44 191 487 3997 E-mail: sales@crabpress.co.uk Web: www.crabpress.co.uk



Hebenstreit Metal Decorating GmbH

Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de

G KBA-MetalPrint

KBA-MetalPrint GmbH Wernerstr. 119-129

D-70435 Stuttgart, Germany Tel: +49 71169971-0 Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de



Miotto Este Via Talamoni 4 I-20047 Brugherio (MI), Italy Tel: +39 0392 878 284 Fax: +39 0398 84594 E-mail: info@miottoeste.it Web: www.miottoeste.it

Metal Decorating -Delta Dampening Systems



Epic Products International Corporation 2801 E. Randol Mill Road Arlington, Texas 76011, USA Tel: +1 817 640 3037 Fax: +1 817 633 3085 E-mail: sales@epicproducts.com Web: www.epicproducts.com

Metal Decorating Equipment (Hoe Printing Press)



Perm Machine & Tool Co PO Box 660 9660 Industrial Drive St John, Indiana 46373, USA Tel: +1 219 365 5000 Fax: +1 219 365 4847 E-mail: perm@permmachine.com Web: www.permmachine.com

Metal Decorating Inks



DIC Coatings - Spain Poligono Ind El Campillo II, Parcela 5 48500 Gallarta Vizcaya, Spain Tel: +34 946 361 999 Fax: +34 946 363 451 E-mail:diccoatings@diccoatings.com Web: www.diccoatings.com

DIC Coatings – UK

Unit 10, Hermes Road Gillmoss Industrial Estate Liverpool L11 0ED, UK Tel: +44 151 548 1134 Fax: +44 151 548 0649 E-mail: uk@diccoatings.com **DIC Graphics Corporation** DIC Building

7-20, Nihonbashi 3-chome Chuo-ku, Tokyo 103-8233, Japan Tel: +81 3 5203 7788 Fax: +81 3 3278 0684 E-mail: dic-chemicoat@ mc.dic.co.jp Web: www.dic.co.jp **Sun Chemical Zao, Russia**

Aeroportovskaya Street 14 140150, Bykovo Ramenski Area, Moscow Region, Russia Tel: +7 495 933 13 03 Fax: +7 495 933 13 09 **Sun Chemical do Brasil Ltda**

Avda Justino de Maio, 140 Guarulhos, Sao Paulo 07222-000, Brazil Tel: +55 11 6462 2500 Fax: +55 11 6462 2527

Sun Chemical Mexico SA de CV

Alce Blanco No 20 Esq Calle 9 Col. Sta María Nativitas 53370 Naucalpan de Juárez, Edo. De México, México Tel: +55 5333 2200 Fax: +55 5373 4705 **PT DIC Graphics** JL. Rawagelam III Blok II L. Kay 8-9

Kawasan Ind. Pulogadung Jakarta 13012 Indonesia Tel: +6221 461 3525 Fax: +6221 461 3524 DIC Graphics (Thailand) Co Ltd

Wijan, 159 Sammit Bldg., 21 Soi Asok, Sukhumvit 21 Rd North Klong Toei, Wattana Bangkok 10110, Thailand Tel: +66 2 260 6630 7 Fax: +66 2 260 6641 2 Shanghai DIC Ink Co Ltd (Shanghai DIC) 3888 HuMing Road 201108 Shanghai, China



Tel: +86 21 64890888

Fax: +86 21 6489 0688

ink maloberti s.r.t

INK Maloberti S.r.I.

via Torino 11 20032 Cormano (MI), Italy Tel: +39 02 6630 2772 Fax: +39 02 6630 2096 E-mail: metaldeco@inkmaloberti.it Web: www.inkmaloberti.it



INX International Ink Co. 10820 Withers Cove Park Drive Charlotte, NC 28278, USA Tel: +1 704 372 2080 Fax: +1 704 372 2087 E-mail: inxmetal@inxintl.com Web: www.inxinternational.com

Necker Tooling



LPT – Lieb Precision Tool, Inc 1819 South Murray Blvd. Colorado Springs CO 80916, USA Tel: +1 719 355 2600 Fax: +1 719 596 3019 Operation Manager: Mike Simonson E-mail: mikes@liebpt.com sales@liebpt.com Web: www.liebpt.com To advertise, contact Victoria Deakins on +44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com



SOLUTIONS IN HARD MATERIALS

 Wallram GmbH

 Schuermannstrasse 40

 45136 Essen

 Germany

 Tel: +49 201 89 63 660

 Fax: +49 201 89 63 630

 E-mail: sales@wallram.de

 Web: www.wallram.de

Necking Machines



Belvac Production Machinery Inc 237 Graves Mill Road, Lynchburg VA 24502-4203, USA Tel: +1 434 239 0358 Fax: +1 434 239 1964 E-mail: info@belvac.com Web: www.belvac.com



ENGINEERING

CarnaudMetalbox Engineering plc

Dockfield Road, Shipley, W Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com



Germann + Frei AG

Martinsbruggstrasse 92 CH-9016 St. Gallen Switzerland Tel: +41 71 282 16 40 Fax: +41 71 282 16 50 E-mail: info@germannfrei.ch Web: www.germannfrei.ch

LANICO

Lanico Maschinenbau Otto Niemsch GmbH

PO Box 3065 D-38020 Braunschweig Germany Tel: +49 531 809 060 Fax: +49 531 809 0627 E-mail: info@lanico.de Web: www.lanico.de

Oven Loggers

SENCON

Sencon North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk Europe (3-Piece) English, Español Tel: +34 937 54 95 26

English, Espanol fel: +34 93/ 34 95 2 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia **Web: www.sencon.com**

Palletizing Equipment

CONDICIT

magnetic systems

Goudsmit Magnetic Systems B.V. PO Box 18, Petunialaan 19 NL-5580 AA Waalre The Netherlands Tel: +31 40221 3283 Fax: +31 40221 7325 E-mail: sales@goudsmit-magnetics.nl Web: www.goudsmit-magnetics.nl

Palletizers/Depalletizers & Pallet Conveying



Arrowhead Systems, Inc. Arrowhead/Busse/SJI Corporation 124 N Columbus Street Randolph, WI 53956, USA Tel: +1 920 326 3131 Fax: +1 866 580 3212 E-mail: inquiry@arrowheadsystems.com Web: www.arrowheadsystems.com



Clevertech Industrial Automation

Via Brodolini 18/A 42020 Cadelbosco (RE), Italy Tel: +39 0522 911 330 Fax: +39 0522 911 201 E-mail: info@clevertech.it Web: www.clevertech.it

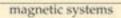
Fleetwood Calde Wyard

FleetwoodGoldcoWyard

1305 Lakeview Drive Romeoville, IL 60446 USA Tel: +1 630 759 6800

Fax: +1 630 759 2299 E-mail: sales@fgwa.com Web: www.fgwa.com





Goudsmit Magnetic Systems B.V. PO Box 18, Petunialaan 19 NL-5580 AA Waalre The Netherlands Tel: +31 40221 3283 Fax: +31 40221 7325 E-mail: sales@goudsmit-magnetics.nl Web: www.goudsmit-magnetics.nl

Parting Machines



Germann + Frei AG Martinsbruggstrasse 92 CH-9016 St. Gallen, Switzerland Tel: +41 71 282 16 40 Fax: +41 71 282 16 50 E-mail: info@germannfrei.ch Web: www.germannfrei.ch

Peelable Membrane Ends



O. KLEINER AG - Flexible Packaging Schützenmattweg 26 CH-5610 Wohlen, Switzerland Tel.: +41 56 618 47 00 Fax: +41 56 618 47 01 E-mail: info@okleiner.ch Web: www.okleiner.ch Web: www.canpeel.com

Peelable Membrane Ends Machinery

Soudronic

Soudronic AG

Industriestrasse 35 CH-8962 Bergdietikon Switzerland Tel: +41 44 743 66 66 Fax: +41 44 743 66 99 E-mail: info@soudronic.com Web: www.soudronic.com



Rainer Naroska Engineering GmbH Im Hengstfeld 19

32657 Lemgo, Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30 E-mail: mail@naroska.com Web: www.naroska.com

Peel Off Aluminium Membrane Ends



DivFood – A Division of Nampak Products Ltd 25 Richard Carte Road Mobeni, Kwazulu-Natal, South Africa Tel: +27 31 450 5874 Fax: +27 31 450 5882 E-mail: sajid.madhanlala@za.nampak.cr

E-mail: sajid.madhanlala@za.nampak.com Web: www.nampak.com

Peel Off Ends

MIVISA Envases SAU Poligono Industrial Los Pinos 30565 Las Torres de Cotillas Murcia, Spain Tel:+34 968 364400 Fax: +34 968 364442 E-mail: mivisa@mivisa.com Web: www.mivisa.com

Peel Off Membranes



Amcor Flexibles Singen GmbH Alusingen-Platz 1 78221 Singen Germany Tel: +49 7731 80 4 E-mail: flexibles@amcor.com Web: www.amcor.com

Photopolymer Printing Plates



70GUN Seven-Ogun International 670 Lakeview Plaza Blvd, Suite K Worthington, Ohio 43085, USA Tel:+1 614 888 8939 Fax: +1 614 888 8938 E-mail: fernanda@sevenogun.com Web: www.sevenogun.com

Production Assistance & Maintenance

Buyers guide



NDH Group

Grosvenor Business Tower TECOM C, 15th Floor, Office # 1503, Dubai United Arab Emirates PO Box 450477 Dubai, UAE Tel: +971 4 4347225 Fax: +971 4 4347226 E-mail : info@ndhgroup.com Web: www.ndhgroup.com

Refurbished Equipment



 World Headquarters

 W. R. Grace & Co. - Conn

 7500 Grace Drive

 Columbia, MD 21044, USA

 Tel: +1 410 531 4000

 Tel: +1 800 638 6014

 Grace Davison Materials & Packaging

Technologies 62 Whittemore Ave Cambridge, MA 02140, USA Tel: +1 617 498 4987

Latin America Grace Brazil Ltda Rua Albion, 229-10 Andor CJ101 Lapa, Sao Paulo AP/Brasil 05077-130 Tel: +55 113649 2704

Asia Pacific W.R. Grace (Hong Kong) Ltd 1010 Huai Hai Zhong Shanghai 200031, China Tel: +86 2154678

Europe Grace GmbH & Co. KG In der Hollerecke 1 67547 Worms, Germany Tel: +49 6241 403.00

www.grace.com



OKL Can Line Inc 11235 Sebring Drive Cincinnati OH 45240, USA Tel: +1 513 825 1655 Fax: +1 513 825 1948 E-mail: sales@oklcan.com Web: www.oklcan.com

Scores & Embossing Tooling



QUALITY & RELIABILITY

International Container Supply Customer Service – USA 7333 Paragon Road, St 100 Centervillem OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net Customer Service – China Tel: +86 137 05 288211 E-mail: avao@icstradina.net Customer Service - Mexico Tel: +52 5555 779087 E-mail: ramador@icstrading.net **Customer Service – Thailand** Tel: +66 86 558 3033 E-mail: chot11000@gmail.com



Micromec Srl Via Palermo 37 20090 Assago (MI) Italy Tel: +39 02 488 8611 Fax: +39 02 488 86133 E-mail: staff@micromec.com Web: www.micromec.com

Scroll Dies



-AMADOR VARAS SA-Amador Varas SA c/Montalegre 32 08915 Badalona Barcelona, Spain Tel: +34 933 952 954 Fax: +34 933 952 954 Fax: +34 933 954 904 E-mail: varas@amador-varas.com Web: www.amador-varas.com



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows IL 60008, USA Tel: +1 847 394 5810 Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com



Micromec Srl

Via Palermo 37 20090 Assago (MI), Italy Tel: +39 02 488 8611 Fax: +39 02 488 86133 E-mail: staff@micromec.com Web: www.micromec.com



Hengli CNC Technology Co, Ltd 9 Huishan Road, Mogan Mountain Economic Development Zone Deqing, Zhejiang Province China 313200 Tel: +86 572 8832016 +86 572 8832000 Fax: +86 572 8832222 E-mail: info@zjhlcnc.net Web: www.zjhlcnc.com

Scroll Shears/Press Automation



Clevertech Industrial Automation Via Brodolini 18/A 42020 Cadelbosco (RE), Italy Tel: +39 0522 911 330 Fax: +39 0522 911 201 E-mail: info@clevertech.it Web: www.clevertech.it

Sealing Compounds



Enriching Lives, Everywhere"

World Headquarters W. R. Grace & Co. - Conn 7500 Grace Drive Columbia, MD 21044, USA Tel: +1 410 531 4000 Tel: +1 800 638 6014

Grace Davison Materials & Packaging Technologies

62 Whittemore Ave Cambridge, MA 02140, USA Tel: +1 617 498 4987

Latin America

Grace Brazil Ltda Rua Albion, 229-10 Andor CJ101 Lapa, Sao Paulo AP/Brasil 05077-130

Tel: +55 113649 2704 **Asia Pacific** W.R. Grace (Hong Kong) Ltd 1010 Huai Hai Zhong Shanghai 200031, China Tel: +86 2154678



Enriching Lives, Everywhere

Europe Grace GmbH & Co. KG In der Hollerecke 1

67547 Worms, Germany Tel: +49 6241 403.00

WAKOL FORECO SRL

Via Kennedy 75 20010 Marcallo con Casone Milan, Italy Tel: +39 02 976 1939 Fax: +39 02 972 53021 E-mail: foreco@foreco.it Web: www.wakolforeco.it

Seaming Chucks & Rolls



CarnaudMetalbox Engineering plc Dockfield Road Shipley, West Yorkshire BD17 7AY, UK Tel: +44 1274 846 200 Fax: +44 1274 846 201 E-mail: adrian.long@eur.crowncork.com Web: www.canlinespares.com

imeta

IMETA srl Strada Burla 279A 43122 Parma, Italy Tel: +39 0521 1688811 Fax: +39 0521 1688819 E-mail: info@imeta.it Web: www.imetasrl.com

Seaming Machines



Lanico Maschinenbau Otto Niemsch GmbH PO Box 3065 D-38020 Braunschweig Germany Tel: +49 531 809 060 Fax: +49 531 809 0627 E-mail: info@lanico.de Web: www.lanico.de



Sargiani SpA Via Farnesiana 84 29100 Piacenza, Italy Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com



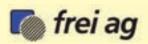
To advertise, contact Victoria Deakins on

+44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com

Sommetrade SL

Parque Tecnologico de Zamudio -Edificio 301 48170 Zamudio (Vizcaya) Spain Tel: +34 94 431 8611 Fax: +34 94 431 8200 E-mail: j.vivanco@sommetrade.com Web: www.sommetrade.com

Seam Protection Systems and Curers for Welded Cans



Frei AG

Hofenstrasse 18 CH-9300 Wittenbach, Switzerland Tel: +41 71 292 3434 Fax: +41 71 292 3400 E-mail: sales@frei-ag.com Web: www.frei-ag.com

Sensor Technology

SENCON

North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com Europe, Middle East, Asia Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Europe (3-Piece) English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +63 2 696 6159 E-mail: info@sencon.asia Web: www.sencon.com

Sheet Coating Control



North, Central & South America Tel: +1 708 496 3100 Fax: +1 708 496 3105 E-mail: info@sencon.com **Europe, Middle East, Asia** Tel: +44 1905 827800 Fax: +44 1905 795876 E-mail: info@sencon.co.uk

Buyers guide

SENCON

Europe (3-Piece)

English, Español Tel: +34 937 54 95 26 Français Tel: +33 1 76 64 12 87 Deutsch Tel: +49 30 87333-3807 Fax: +34 937 54 96 87 E-mail: info@sencon.eu

Asia (3-Piece) English Tel: +63 2 696 6965 Fax: +63 2 696 6159

E-mail: info@sencon.asia

Sheet Feed Presses



Alfons Haar Alfons Haar Maschinenbau GmbH &

CoKG Fangdieckstraße 67 22547 Hamburg, Germany Tel: +49 40 833910 Fax: +49 40 83391220 Web: www.alfons-haar.de E-mail: office@alfons-haar.de

Alfons Haar Inc

150 Advanced Drive Springboro, Ohio 45066, USA Tel: +1 937 560 2031 Fax: +1 937 560 2032 E-mail: sales@alfons-haar.us

Alfons Haar Maschinenbau GmbH &

Co KG Singapore Representative Office (RO) 11C Jalan Arif, Singapore Tel: +65 9833 2083 Fax: +65 6399 2646 E-mail: andy@alfons-haar.per.sg



Cantec GmbH & Co KG Helenenstrasse 149 D-45143 Essen, Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



Rainer Naroska Engineering GmbH Im Hengstfeld 19 32657 Lemgo Germany Tel: +49 5261 6606 0 Fax: +49 5261 6606 30

E-mail: mail@naroska.com Web: www.naroska.com



PO Box 4338, 10655 State Route 47 Sidney OH 45365-4338, USA Tel: +1 937 498 4901 Fax: +1 937 498 4338 E-mail: carl@sankyoamerica.com Web: www.sankyoamerica.com



Shin-I Machinery Works Co Ltd No 43 Chung Cheng St Chingshui, Taichung Taiwan ROC Tel: +886 4 2623 8181 Fax: +886 4 2623 2129 E-mail: shinican@ms15.hinet.net Web: www.shinican.com

Sheeting Lines



LITTELL, LLC 1211 Tower Road Schaumburg IL 60173, USA Tel: +1 630 622 4700 Fax: +1 630 622 4747 E-mail: info@littell.com Web: www.littell.com



Hengli CNC Technology Co, Ltd 9 Huishan Road, Mogan Mountain Economic Development Zone, Deqing, Zhejiang Province China 313200 Tel: +86 572 8832016 +86 572 8832000

Fax: +86 572 8832222 E-mail: info@zjhlcnc.net Web: www.zjhlcnc.com

Shell Tooling



Apex Tool Works Inc 3200 Tollview Drive Rolling Meadows, IL 60008, USA Tel: +1 847 394 5810 Fax: +1 847 394 2739 E-mail: apextool@apextool.com Web: www.apextool.com



International Container Supply Customer Service – USA 7333 Paragon Road, St 100 Centerville, OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net Customer Service – China Tel: +86 137 05 288211 E-mail: gyao@icstrading.net Customer Service – Mexico Tel: +52 5555 779087 E-mail: ramador@icstrading.net Customer Service – Thailand

Tel: +66 86 558 3033 E-mail: chot11000@gmail.com

Slitter Equipment



Mülisacker 221 CH-5705 Hallwil, Switzerland Tel: +41 62 777 4440 Fax: +41 62 777 4441 E-mail: sales@canman.ch Web: www.canman.ch Member of SWISSCAN Network Web: www.swisscan.net



Hengli CNC Technology Co, Ltd

9 Huishan Road, Mogan Mountain Economic Development Zone, Deqing, Zhejiang Province, China 313200 Tel: +86 572 8832016 +86 572 8832000 Fax: +86 572 8832222 E-mail: info@zjhlcnc.net Web: www.zjhlcnc.com

Stretch Forming Machines



Sargiani SpA Via Farnesiana 84 29100 Piacenza, Italy Tel: +39 0523 615 250 Fax: +39 0523 593 938 E-mail: sargiani@sargiani.com Web: www.sargiani.com

Thermal Oxidizers



Hebenstreit Metal Decorating GmbH Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de

KBA-MetalPrint GmbH

Wernerstr. 119-129 D-70435 Stuttgart Germany Tel: +49 71169971-0 Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de

Training & Commissioning



NDH Group

Grosvenor Business Tower TECOM C, 15th Floor, Office # 1503, Dubai, United Arab Emirates PO Box 450477 , Dubai, UAE Tel: +971 4 4347225 Fax: +971 4 4347226 E-mail : info@ndhgroup.com Web: www.ndhgroup.com

Turnkey Can Making Lines



Cantec GmbH & Co KG

Helenenstrasse 149 D-45143 Essen Germany Tel: +49 201 633 1461 Fax: +49 201 633 1239 E-mail: info@cantec.com Web: www.cantec.com



Soudronic AG

Industriestrasse 35 CH-8962 Bergdietikon, Switzerland Tel: +41 44 743 66 66 Fax: +41 44 743 66 999 E-mail: info@soudronic.com Web: www.soudronic.com

Turnkey Can Making Lines



SWISSCAN Network Muelisacker 221 CH-5705 Hallwil, Switzerland Tel: +41 62 777 44 40 Fax: +41 62 777 44 41 E-mail: box@swisscan.net Web: www.swisscan.net

Turnkey Project Management



NDH Group

Grosvenor Business Tower TECOM C, 15th Floor, Office # 1503, Dubai, United Arab Emirates PO Box 450477, Dubai, UAE Tel: +971 4 4347225 Fax: +971 4 4347226 E-mail : info@ndhgroup.com Web: www.ndhgroup.com

Twist Off Caps

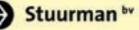


MIVISA Envases SAU Poligono Industrial Los Pinos 30565 Las Torres de Cotillas Murcia, Spain Tel;+34 968 364400 Fax: +34 968 364442 E-mail: mivisa@mivisa.com Web: www.mivisa.com

Two- and Three-Piece Printing Blankets



70GUN Seven-Ogun International 670 Lakeview Plaza Blvd, Suite K Worthington Ohio 43085, USA Tel:+1 614 888 8939 Fax:+1 614 888 8938 E-mail: fernanda@sevenogun.com Web: www.sevenogun.com Used/Refurbished End Equipment



Stuurman BV PO Box 35, 1520 AA Wormerveer The Netherlands Tel: +31 75 6283551 Fax: +31 75 6286037 E-mail: info@stuurmanbv.com Web: www.stuurmanbv.com

Used/Refurbished Equipment



Can Making Solutions SL Corredera San Marcos 37 30B 23700 Linares (Jaén), Spain Tel: +34 953 606 375 Fax: +34 953 691 857 E-mail: info@canmakingsolutions.com Web: www.canmakingsolutions.com

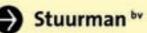


Container Fabrication Machinery

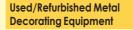
2216 E Miner Avenue Stockton, CA 95205, USA Tel: +1 209 469 7384 Fax: +1 209 469 4826 E-mail: sales@canmaking.net Web: www.canmaking.net



Lacueva Can Making Machinery S.L. Pol.industrial El Roturo Parcela 1, 26511 El Villar De Arnedo La Rioja, Spain Tel: +34 941 130918 Fax: +34 941 135113 E-mail:lacueva@maquinarialacueva.com Web: www.maquinarialacueva.com



Stuurman BV PO Box 35, 1520 AA Wormerveer, The Netherlands Tel: +31 75 6283551 Fax: +31 75 6286037 E-mail: info@stuurmanbv.com Web: www.stuurmanbv.com





Brodie System, Inc

1539 West Elizabeth Ave Linden, NJ 07036, USA Tel: +1 908 862 8620 Fax: +1 908 862 8632 E-mail: tnielsen@brodiesystem.com Web: www.brodiesystem.com



Hebenstreit Metal Decorating GmbH

Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim, Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de

KBA-MetalPrint GmbH Wernerstr. 119-129 D-70435 Stuttgart, Germany Tel: +49 71169971-0 Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de



Miotto Este Via Talamoni 4 I-20047 Brugherio (MI), Italy Tel: +39 0392 878 284 Fax: +39 0398 84594 E-mail: info@miottoeste.it Web: www.miottoeste.it



Perm Machine & Tool Co

PO Box 660, 9660 Industrial Drive St John, Indiana 46373, USA Tel: +1 219 365 5000 Fax: +1 219 365 4847 E-mail: perm@permmachine.com Web: www.permmachine.com

UV Curing Equipment



GEW (EC) Limited Kings Mill Lane, South Nutfield Redhill, Surrey RH1 5NB, UK Tel: +44 1737 824 500 Fax: +44 1737 823 822 E-mail: sales@gewuv.com Web: www.gewuv.com



To advertise, contact Victoria Deakins on

+44 1474 532202. Fax: +44 1474 532203 Email: vicky@bellpublishing.com

Hebenstreit Metal Decorating GmbH Gottlieb-Daimler-Strasse 15/2 74385 Pleidelsheim, Germany Tel: +49 7144 88980-0 Fax: +49 7144 88980-50 E-mail: info@hebenstreit-gmbh.de Web: www.hebenstreit-gmbh.de



IST Metz GmbH Lauterstrasse 14-18 D-72622 Nürtingen

Germany Tel: +49 7022 6002 0 Fax: +49 7022 6002 76 E-mail: info@ist-uv.com Web: www.ist-uv.com



KBA-MetalPrint GmbH Wernerstr. 119-129 D-70435 Stuttgart Germany Tel: +49 71169971-0

Fax: +49 711 69971-670 E-mail: info@kba-metalprint.de Web: www.kba-metalprint.de



Roeslein & Associates Inc 9200 Watson Road, Suite 200 St Louis MO 63126-1528, USA Tel: +1 314729 0055 Fax: +1 314729 0070 E-mail: sales@roeslein.com Web: www.roeslein.com



UnimaQ Ltd

Unit 2, Pinfold Lane Llay South Industrial Estate Llay Wrexham LL12 0PX, UK Tel: +44 1978 855 558 Fax: +44 1978 855 573 Mobile: (+44) 7720 468 309 E-mail: enquiries@unimaq.co.uk Web: www.unimaq.co.uk

Vacuum Pumps & Vacuum Systems



Via N. Bruno 34 10098 Rivoli (TO) Italy Tel: +39 011 950 40 30 Fax: +39 011 950 40 40 E-mail: info@pneumofore.com Web: www.pneumofore.com

Wagner Coater Parts



Perm Machine & Tool Co PO Box 660, 9660 Industrial Drive St John, Indiana 46373, USA Tel: +1 219 365 5000 Fax: +1 219 365 4847 E-mail: perm@permmachine.com Web: www.permmachine.com

Washer Mats & Belts



Ashworth Bros, Inc 450 Armour Dale Winchester, VA 22601, USA Tel: +1 540 662 3494 Fax: +1 540 662 3150 E-mail: ashworth@ashworth.com Web: www.ashworth.com

Washers for Cans



Worldwide Headquarters: International Thermal Systems LLC 4697 W Greenfield Avenue Milwaukee, WI 53214, USA Tel: +1 414 672 7700 Fax: +1 414 672 8800 E-mail: matt.wingert@itsllcusa.com Web: www.itsllcusa.com European Office: International Thermal Systems Ltd 11 Ham Common, Richmond London TW10 7 JB, UK Tel: +44 7900 191 352 E-mail: david.reeve@itsllcusa.com

Asian Office: ITS Industrial Thermal Equipment Co Ltd

Tel: +86 21 6774 1033 Fax: +86 21 6774 2860 E-mail: matt.wingert@itsllcusa.com

Cincinnati Industrial Machinery 4600 N Mason-Montgomery Road Mason, OH 45040, USA TF Phone: (800) 677-0076 Tel: +1 513 923 5601 Fax: +1 513 923 5694 E-mail: sales@cinind.com Web: www.cinind.com



VMI GROUP

VMI Holland BV Gelriaweg 16, 8161 RK Epe The Netherlands Tel: +31 578 679 111 Fax: +31 578 621 317 E-mail: sales@vmi-group.com Web: www.vmi-group.com

Washer Ovens

Ashworth

Ashworth Bros, Inc 450 Armour Dale Winchester VA 22601, USA Tel: +1 540 662 3494 Fax: +1 540 662 3150 E-mail: ashworth@ashworth.com Web: www.ashworth.com

Welding Machines



International Container Supply Customer Service – USA 7333 Paragon Road, St 100 Centerville OH 45459, USA Tel: +1 937 291 0228 Fax: +1 937 291 0236 E-mail: customerservice@icstrading.net Web: www.icscangroup.net Customer Service – China Tel: +86 137 05 288211 E-mail: gyao@icstrading.net Customer Service - Mexico Tel: +52 5555 779087 E-mail: ramador@icstrading.net Customer Service – Thailand Tel: +66865583033

E-mail: chot11000@gmail.com

CAN MAN

Can Man Aktiengesellschaft

Buyers guide

Mülisacker 221 CH-5705 Hallwil, Switzerland Tel: +41 62 777 4440 Fax: +41 62 777 4441 E-mail: sales@canman.ch Web: www.canman.ch Member of SWISSCAN Network Web: www.swisscan.net

Welding Machines for Drums & Pails



Soudronic AG Industriestrasse 35 CH-8962 Bergdietikon, Switzerland Tel: +41 44 743 66 66 Fax: +41 44 743 66 99 E-mail: info@soudronic.com Web: www.soudronic.com

Wicket and Chains for Sheet Fed Ovens



Perm Machine & Tool Co PO Box 660 9660 Industrial Drive, St John Indiana 46373, USA Tel: +1 219 365 5000 Fax: +1 219 365 4847 E-mail: perm@permmachine.com Web: www.permmachine.com



The Technical Conference and Exhibition that brings together global suppliers and can makers and fillers from across Asia

2007 Bangkok, Thailand 2008 Kuala Lumpur, Malaysia 2009 Bangkok, Thailand 2010 Bangkok, Thailand 2011 Ho Chi Minh City, Vietnam

2012 ?... You tell us your favoured destination! please e-mail suggestions to info@gsia-can.com



info@asia-can.com www.asia-can.com

Diary

October 2011

Asia CanTech 2011 The Conference for Can Makers & Fillers in the Asia Pacific Region 17-19 October, Rex Hotel, Ho Chi Minh, Vietnam Contact: Chrissy Payne Tel: +44 1474 532202 Email: chrissy@asia-can.com Web: www.asia-can.com

Luxe Pack

19-21 October, Grimaldi Forum, Monaco, France Tel: +33 4 7473 4233 Email: info@idice.fr Web: www.luxepack.com

November 2011

Brau Beviale

10-12 November, Exhibition Centre Nuremberg, Germany Contact: Nuremberg Messe Tel: +49 911 860 60 Web: www.brau-beviale.de

Principles of Canning Course

14-18 November, Chipping Campden, UK Contact: Campden BRI Tel: +44 1386 842104 Email: training@campden.co.uk Web: www.campden.co.uk

December 2011

Incal India – International Conference on Aluminium 6-8 December, HICC, Hyderabad Contact: Aluminium Association of India Tel: +91 80 25582197 E-mail: aluminium@eth.net Web: www.incalindia.com

January 2012

European Packaging Summit 30-31 January, Berlin, Germany Contact: WTG Events Tel: +44 20 7202 7690 E-mail: joy.parr@wtgevents.com Web: www.eupacksummit.com

March 2012

Foodex 25-27 March, NEC Birmingham, UK Contact: Daren Rose-Neale, Event Director Tel: +44 1293 610355 E-mail: daren.rose-neale@wrbm. com Web: www.foodex.co.uk

Industry Interview

Candid (adj.truthful and straightforward; frank)

Patrick Geffers, sales manager graphics, Stork Prints Austria S tork Prints Austria is part of the Stork Prints Group, a global leader in the textile and graphics printing markets, with an annual turnover of €180 million.

The company offers total system solutions for rotary screen printing, digital printing and dry offset printing which is used in the two-piece can industry.

The company was founded in 1947, however direct laser engraving specialist Stork Prints Austria was established in 1972. Since then, the company has been involved in

manufacturing printing forms and prepress systems. In 1986, the first laser engraver was launched. Since then over 2000 digital machines have been



quality of the label more and more. Promotional designs for special events like Formula One, a football tournament or a popstar will grow. The metal industry must improve the quality of the label to be able to fulfill brand owners' demands in the future. If not, other packaging formats will win.

We are currently working to optimise our own software including a RIP to meet all the requirements of the can industry. And we have just finalised one

> project, reducing the initial investment for our systems by more than 10 per cent.

The process

Our Direct Laser Engraving (DLE) process offers better quality and consistency than all competing technologies. With our process the non-printing areas of the printing plate are removed in a single step by a high power laser beam. Plate relief can be more shallow with more stable print elements since the engraving can be shaped in the third (z-axis) dimension. The parameters of total relief depth and dot support within one plate are not fixed as physically given when using UV exposure.

They are operator controlled and adjustable to the density in the design. At the same time DLE provides optimum reverse depth in the image without the need to adjust

installed worldwide. We provide machines making high definition plates for the twopiece can industry. After our first successful installation at CanPack in Poland and

Showa Aluminium Can in Japan we recognised this industry as a niche market for us. But we learned quickly that our systems were able to add significant value to the two-piece can industry. We serve the dry offset industry worldwide, from two-piece beverage cans, monobloc aerosol cans and aluminium tubes as well as the plastic cup industry.

I am sales manager graphics and started working here in May 2008. My current job involves all kind of sales and marketing activities like organising fairs and events as well as attending conferences like *Asia CanTech*. I also develop strategies on how to enter new markets like the Middle East, South Africa, Asia and other regions.

Challenges

The biggest challenge facing the metal packaging industry is to defend the can against other packaging formats. In many regions around the world consumers are very price sensitive. PET and Tetra Pak cartons offer good value for money and brand owners like the printing quality of this packaging. In the future, brand owners will judge the

The biggest challenge facing the metal packaging industry is to defend the can against other packaging formats

overall plate relief. All global can makers use our technology and in addition we have a lot of installations at repro houses and independent can makers all

over the world. I am sure that its popularity will continue to increase as the demand for high-quality designed cans grows. All the big fillers and brand owners like Red Bull, Coca-Cola, Pepsi, Aujan are keen on it.

Our system is equipped with a magnetic drum of a size of 720mm length and 1206mm circumference. The drum is always customised and equipped with the registration pins used at the can maker. We are able to make nine plates at the same time and it takes – depending on different parameters – between one and 1.5 hours. Then the plates are ready for the deco. The biggest advantage is the quality: screen resolution previously was typically 72–85 lpi, with DLE, 120 lpi is now quite basic with 150 lpi becoming the common standard.

I think innovation and technological progression is important within the industry. What I have learnt over the last few years is that the can industry is totally focused on the volume. I hope that in the future the industry starts paying more attention to the plate making process. If you show brand owners a high quality label on a daily basis then I am sure that the image of the can will win.

featured in the Candid column, or you know someone who would, please contact Alec Peachey. Email: alec@bellpublishing.com Tel: +44 1474 532 202

If you would like to be



For only €199/\$277/£153 you will receive your own personal copy of CanTech International for 12 months. You will also receive FREE OF CHARGE:

Unlimited password access to our on-line library of news and features @ www.cantechonline.com – FREE!

Weekly electronic newsletter with up-to-the-minute information – FREE!

Subscribe on-line NOW: www.cantechonline.com

| Name | Subscription rates (tick one box) |
|---|---|
| Job Title | Postal & Digital Issue ONE YEAR (tick one box) □ US\$277 □ €199 □ £153 |
| Company Name | Postal & Digital Issue TWO YEAR (tick one box) |
| Delivery Address | □ U\$\$480 □ €351 □ £265 |
| | Digital Issue only ONE YEAR (tick one box) □ US\$263 □ €189 □ £145 |
| Town/City | Yes I want to subscribe to CanTech International |
| County/State | Simpleture |
| Postal /7in Code | Signature Date |
| Postal/Zip Code | Payment options (tick one option) |
| Country | I enclose a cheque for(amount) |
| Telephone | payable to Bell Publishing Ltd |
| Fax | \square Please send an invoice to the above address |
| E-mail | Please charge(amount) to my |
| | □ Mastercard □ VISA |
| SEND TO: CanTech International, Bell Publishing Ltd, The Maltings, 57 Bath Street, | Card No |
| Gravesend, Kent DA11 0DF, UK | |

FAX TO: +44 1474 532203

Expiry Date.....

Let's Talk Color Inspection.

Just say our name. Quality canmakers worldwide will tell you why they rely on KromaKing[®] color decoration and mixed-label inspection systems from Applied Vision. For nearly 15 years, we have invested tens of thousands of hours of research and development in making inspection, color measurement and process monitoring more accurate, reliable and easy for you. In fact, we lead the industry in helping canmakers minimize rejected and HFI product. To find out what we can do for you, have a word with us.





www.appliedvision.com/color

KromaKing is a registered trademark of Applied Vision Corporation