

6/2016

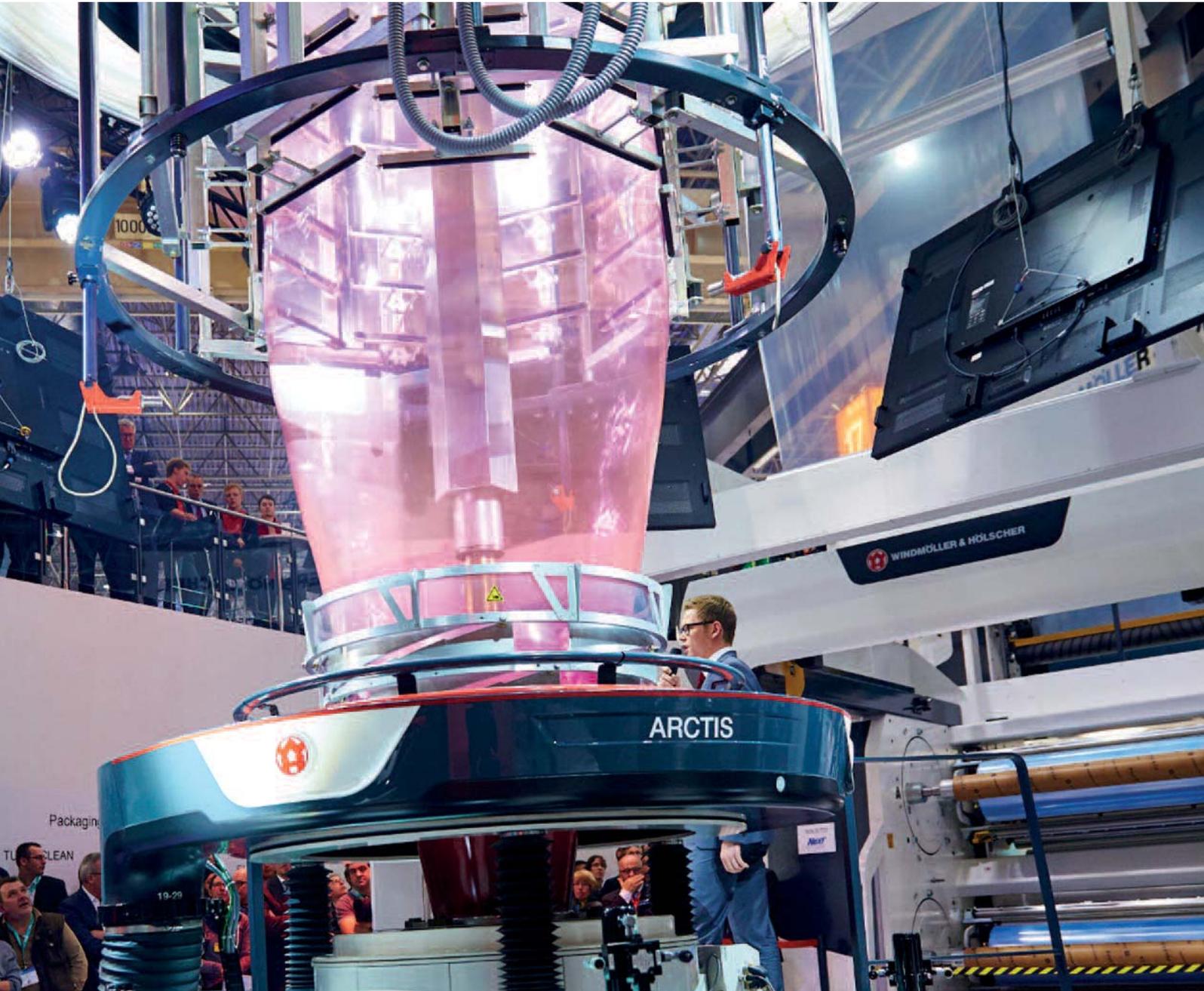
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EXTRUSION

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p.21: Intelligent Machines Bring Packaging 4.0 to Life

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The NEW generation of cutters for profiles



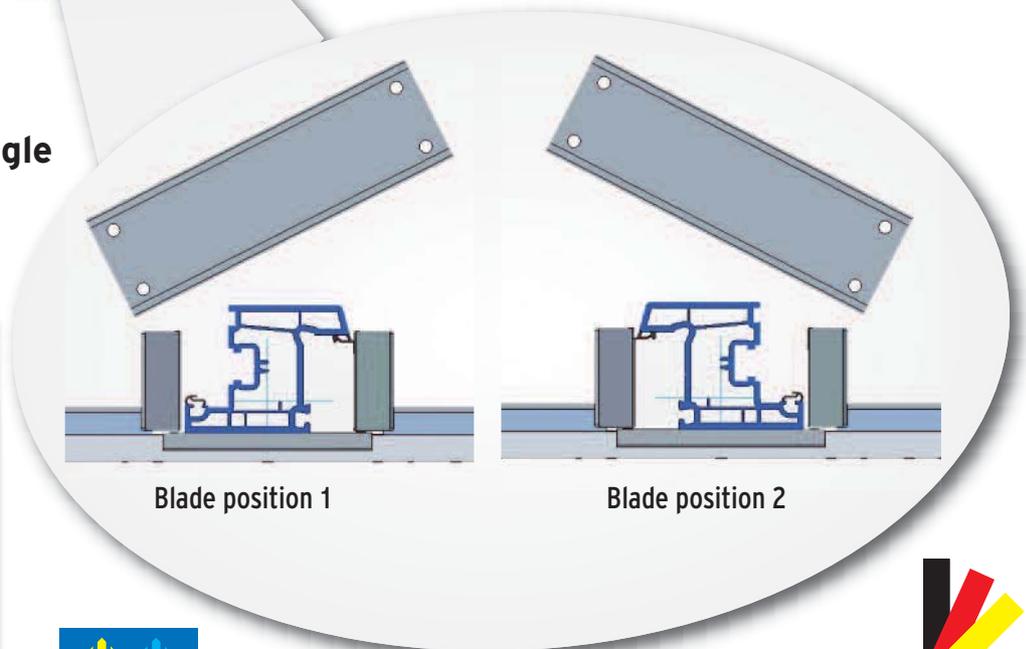
- Mirrored changing of the cutter angle during running production
- For optimised cutting of the respective profile
- Changing within 10 to 15 seconds, between two cuts
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PTW-200 changeable cutting angle

Cutting Unit



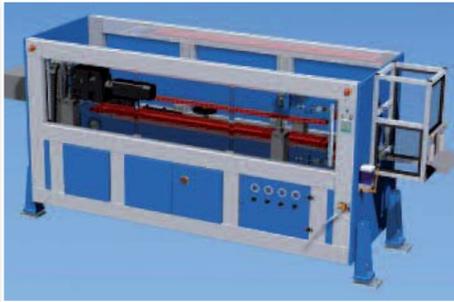
EQUIPMENT FOR EXTRUSION



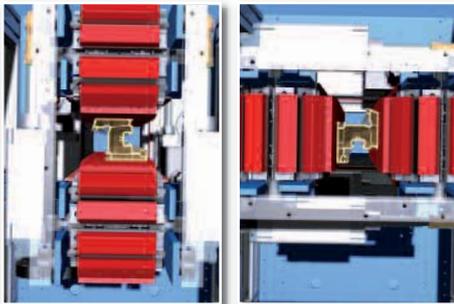
FOR PROFILE EXTRUSION LINES



Calibration table KTS 01,
rear



Caterpillar
Haul off



Haul off
rotating 90°



PRO 63
automatic stacker

FOR SHEET EXTRUSION LINES



Calender



Roller withdrawal AZ 8,
outlet side



Slitting RB 2 with four
sawing stations



Transverse separating
cutter QSS, inlet

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The company Reifenhäuser Blown Film has installed further blown film lines with the EVOLUTION Ultra Flat film flattening unit in North America where superior reel quality is becoming a crucial selling point.

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EREMA recycled over 30 tonnes of plastic waste live on an INTAREMA TVEplus 1108 recycling system during the K show. At the same time EREMA presented the first Industry 4.0 package in the field of plastics recycling, with the trade fair motto of CAREFORMANCE.

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The extraordinarily good economic state the international plastics and rubber industry and the positive outlook for the future characterised the world’s biggest trade fair for the industry and made for an excellent mood amongst the 3,285 exhibitors of K 2016 in Düsseldorf.

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ILLIG	14+26	Windmüller&Hölscher	I Cop.+21
IPTF 2017.....	IV Cop.		



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Smart Extrusion at Your Service

■ Just in time for K 2016, our publishing house launched a drastically redesigned version of the website, which was baptized Smart Extrusion.

The new version still allows users to browse through the latest issues of all the five journals of the publishing house: Extrusion, Extrusion International, Extrusion Russia Edition, Plastcourier-Extrusion and Extrusion Asia Edition. The overall experience is much easier and more enjoyable: you can start reading a journal directly in your web browser or save it as a PDF file for getting round to it later, while the interactive table of contents enables you to quickly skip to articles of interest. New journals appear at the website on the release date.

Moreover, we have totally reorganized the news section, which is now divided by type of content. In addition to the News that tells you about the most relevant goings-on in the industry, theme-based events and new developments, we now have the Articles section, reserved for larger texts with detailed analyses of any problems related to our topic, the Application Reports one with materials on implementation of

various innovative solutions in specific industries, and the Videos section with a vast collection of relevant videos.

Another way of grouping the information on our website is a two-level tag system. Each tag points to a particular subject area, from the most common topics such as "Basic extrusion equipment" to the quite specialized ones such as "Quick size change systems" or "Belling machines". Multiple tags are assigned to each news, article or video, depending on technologies mentioned in it. We hope that the users will thus find the exact information that interests them, and with minimum delay.

The website is available in English, German and Russian.

The updated site opens up new opportunities for commercial cooperation, both as banner advertising and information support. Please send requests to v.raykhlin@vm-verlag.com, and we will be happy to get back to you with all the options available.

► www.extrusion-info.com



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- // Practically oriented, proven system components



Trustworthy film solutions for security documents

■ TRUSTECH is the new international trade fair for card manufacturers which is taking place for the first time from November 29 to December 1 at Cannes in southern France. The word “trust” is incorporated into the name of the new event but is also a part of the supplier promise of Covestro: “Tailored Trust” – this stands for trustworthy product solutions that enable the highest security standards.

To fulfill the diverse demands of security card manufacturers, Covestro has developed a family of Makrofol® and Bayfol® brand polycarbonate films and a line of thermoplastic Platilon® polyurethane films. The range has been expanded to include holographic Bayfol® HX grades supporting high-level counterfeit protection thanks to sophisticated embedding and protection of a wide range of personalized data.

Fast, high-contrast personalization

One of the products Covestro is exhibiting at TRUSTECH is the polycarbonate film Makrofol® ID Superlaser. Passports using this material can be laser-engraved with the holder’s data and photo in higher contrast than is possible with standard laser-reactive overlay films.

Because the personal data are in both the overlay and the core, the three-ply film also offers better protection against forgery. Furthermore, the personalization process is faster and less costly compared to conventional production methods. The development of this innovative film and the patent-protected Superlaser technology is Covestro’s response to current trends in the market for security cards.

Holographic films for forgery-proof ID cards

Manufacturers and their partners must continuously develop new solutions to protect security cards even more effectively



against forgery and manipulation. Holographic films from Covestro’s Bayfol® HX line are one promising option for protecting optically variable devices (OVDs).

With this technology, security holograms are produced in a photopolymer film that can be used as an individual security feature, either as an insert or overlay film on one or both sides of the cards. Particularly in overlay films, numerous features can be incorporated into a single layer to offer very high-level security.

Durable IDs

Platilon® ID thermoplastic polyurethane films are the material of choice when very good mechanical strength and longevity are critical, such as the hinge of a passport. They also exhibit very good bonding strength and flexibility. Documents made from this material can be opened and closed an infinite number of times without affecting the flexibility or tearing at the hinge. The film can also be stitched into a passport.

► www.covestro.com

Brabender cooperates with Russian university

■ At this year’s K show Brabender GmbH & Co. KG had the pleasure to welcome a high-ranking visitor. The leading manufacturer for instruments and equipment for testing material quality and physical properties was



meeted Mr. Rustam Minnikhanov, President of the Russian Republic of Tatarstan. In his presence Stephan Lange, Managing Director of Brabender,

and Alexander Harwardt, Managing Director of Brabender’s Russian subsidiary in Kazan – the capital of the Republic of Tatarstan – signed a cooperation agreement with the Kazan National Research Technological University (KNRTU).

In 2017 the university intends to build a research and development laboratory which – among others – is to be equipped with Brabender instruments. For this purpose a cooperation agreement has been set up which will be signed by Mr. German Dyakonov, President of the KNRTU. The ceremony was taken place at the premises of Messe Düsseldorf.

► www.brabender.com

Service center in Poland

■ With the extrusion capacity currently installed in Poland, it has advanced to become one of the largest European manufacturers of plastic profiles. Both in the field of window profile and technical profile extrusion, the Greiner Extrusion Group is experiencing increasing demand for services, spare and wear parts, and process optimizations to further increase efficiency. The Greiner Extrusion Group now offers all services for such customer needs locally in Poland through its own service and distribution subsidiary that it has established there.

The central location of the new site of Greiner Extrusion Sp. z o.o. in Teresin, near Warsaw, provides an excellent home base for the direct support of all extrusion companies throughout Poland. "We are building on close personal contact with our customers and fast on-site support. Our Polish staff are extrusion specialists with many years of experience in the industry and provide our customers with support in the language of the country. That increases quality and efficiency when clearing technical details, and ultimately ensures better results for the customer," explains Regional Sales Director Christian Nistelberger. The company management of the Greiner Extrusion Group worked towards establishing a service subsidiary in Poland right from the outset. "For sustainably higher profile quality, greater machine



*Jerzy Teodor Stachowiak, Area Sales Manager Poland,
Gerhard Ohler, CEO Greiner Extrusion Group
(Picture: © Greiner Extrusion Group)*

availability and continuously increasing efficiency, you need a reliable and competent local partner. It is our goal to be that kind of partner for all profile extruders in Poland with our team of experts," declares Gerhard Ohler, CEO of the Greiner Extrusion Group.

► www.greiner-extrusion-group.com

New Generation in the BEKUM Group

■ Dipl.-Ing. Michael Mehnert (34), youngest son of the company's founder Gottfried Mehnert, joined the family company in various functions after successfully studying mechanical engineering in Aachen. In spring 2016, Michael Mehnert was appointed Managing Director of BEKUM Maschinenfabrik Traismauer GesmbH, with the aim of supporting the long-standing Managing Director Dipl.-Ing. MBA Johannes Schwarz in the management and development of the company.

Michael Mehnert recently assumed company shares of the BEKUM Group, so that he now functions as shareholder, beside



Dipl.-Ing. Michael Mehnert

Gottfried Mehnert, thus allowing the company to remain fully in family ownership. Gottfried Mehnert founded BEKUM 55 years ago and has built up the company group. His inventions (such as ring surface calibration, dual machines, advances in co-extrusion) have crucially shaped the extrusion blowing industry and are currently used in almost all blow-moulded articles in the world, for which he received numerous awards (including the Federal Cross of Merit, Plastics Hall-of-Fame Lifetime Award). The new generation in the BEKUM Group was introduced with the share transfer to Michael Mehnert, who would like to preserve the qualities of the company while also setting new directions: "Our common cause is to lead our medium-size family business and its more than 300 employees into a successful future. At the same time, our production relocation to Traismauer was an important step in making BEKUM even more competitive. Other steps will follow as we continue to invest in the company and in innovations. I see it as my job to conserve the qualities of BEKUM while simultaneously bringing fresh momentum to the company."

► www.bekum.com

Updated Buss Kneader optimises cable compound production

■ Buss AG from Switzerland has updated its MX 105 compounding line for processing highly filled or crosslinkable halogen-free flame retardant (HFFR) cable compounds, optimising it in many respects. Thanks to a simplified design, this system which is capable of handling throughputs of up to 1500 kg/h now has a particularly advantageous price-performance ratio without compromising on functionality, machine operability or achievable product quality. BUSS has also made the machine quieter and more energy efficient. The MX 105 is the mid-range model of the MX series, is available with a processing length of 15 or 22 L/D and can be fitted with two or three feed hoppers. For processing semiconductor compounds or carbon black masterbatches, the discharge extruder can be replaced by a melt pump. The optimised toothing of the new, combined reduction/stroke gearbox offers greater efficiency together with lower noise. The electric drives of the Buss Kneader and discharge extruder are designed to operate at motor speeds which are above 70% of nominal speed while outputting at least 50% of rated torque, so ensuring they achieve efficiency of at least 90%. The hinged process section now opens even wider to 120 degrees, providing unprecedented accessibility and further enhancing ease of maintenance and operation. The redesigned, compact discharge extruder with a fully retractable pelletiser stands out by its greatly reduced footprint. The discharge screw is now electrically heated and air-cooled, so simplifying the line in comparison with the previous oil heating system, while simultaneously increasing safety and operational reliability. Moreover, a screen changer can now also be retrofitted.



MX 105-15 F compounding line for processing Halogen-Free Flame Retardant (HFFR) cable compounds. Photo: Buss AG, Pratteln

The pelletiser's three-blade knife arm ensures excellent cutting quality at moderate speeds. The new arrangement of the knife drive improves accessibility, simplifies operation and boosts operational reliability in this area too. The Buss MX series is fitted with SIMATIC-S7 or, with immediate availability, also with Allen Bradley control systems. User interface options include SCADA solutions with Simatic WinCC or GE-Cimplicity, while control panel options include the SIMATIC TP 2200 Comfort and the Allen Bradley Panel View series.

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ILLIG strengthens presence in China



■ On Tuesday, October 25, 2016, ILLIG, the internationally leading thermoforming specialist, and representatives of the Chinese local government „Administrative Committee of Zhejiang Haining Economic Development Zone“ signed a contract for setting up a Customer Relation Center with a showroom for thermoforming machines and thermoforming molds. The intent of the Zhejiang Haining Economic Devel-

opment Zone is to establish companies of the plastic processing and supplying industry. „From Haining we will provide technical training for our Chinese customers to make them familiar with the thermoforming technology and we will offer service on site“, indicates Karl Schäuble, ILLIG Managing Director, the reasons for this decision. In the course of the agreement the foundation of the ILLIG China branch office is planned as 100% ILLIG subsidiary. The new Haining site in the Zhejiang province in the Yangtze delta is located ideally when it comes to logistics between the major cities of Hangzhou and Shanghai. The new base will centrally coordinate the service for ILLIG machines in China from Haining and the staff there will also be in charge of customer care on site. The current expansion of the location establishes the lasting, stable market position of ILLIG machines during the last years in the growing Chinese market and in Southeast Asia.

Further on ILLIG agreed the collaboration with the company Zhejiang Wankai New Materials Co. Ltd., one of the leading Chinese producers of PET.

► www.illig.de

Making the most of new Iranian opportunities

■ With Iran having been largely cut off in the past decade from many earlier trading relationships due to sanctions, the plastics machinery sales department of plastics processing machinery producer The Japan Steel Works Ltd., Tokyo, now makes the most of new opportunities by organizing a seminar together with technology partners, for around 100 participants, in Teheran on 15 February 2017. The date has been chosen deliberately to follow immediately after the two-day 2nd Masterbatch & Polymer conference in Teheran, organized by the IMBPA Iran Masterbatch & Compound Producers Association.

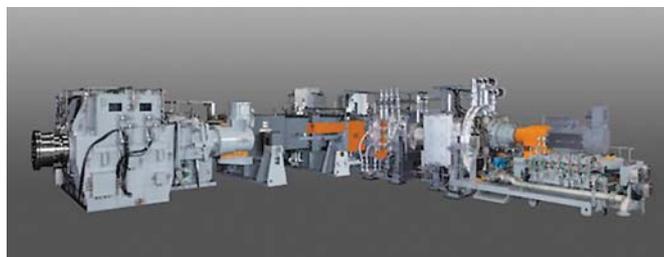
JSW Sales assistant manager Tadashi Gion carries overall responsibility for organization and running of the JSW seminar in Teheran and it aims at assisting JSW to enhance its presence in the Iranian market, following lifting of trade sanctions against the country in early 2016. The seminar forms an important tool here in “creating new network and business opportunities”, Gion says.

Iran is by no means a new market for JSW, or its South Korean extrusion machinery subsidiary SM Platek (SMP), which

JSW acquired in May 2015. Gion says both companies have built up experience from a long tradition and history in exporting to Iran. They have both delivered many extruders to the Iranian market, already before trade sanctions began to affect business.

Main emphasis at the seminar will be placed on JSW's large twin and single screw extruders and mixers (JSW CMP, CIM and P series) for polyolefins such as PP, LLDPE/

JSW CIM mixer (photos:JSW)



HDPE and LDPE. Tadashi Gion states "JSW has the most delivery experience, more than any other extruder manufacturers, for polyolefin applications like LLDPE/HDPE and LDPE in Iran".

Presentation of latest technology developments is a major theme of the seminar, where JSW will focus on large polyolefin and more specialized TEX smaller compounding extruders (the latter down to 25 mm screw diameter) and its new technical center in Dusseldorf, Germany, SMP on its more general TEK extruders (generally not exceeding 100 mm screw diameter).

For its part, JSW will emphasize high throughput, trouble-free economical processing and environmental aspects in its presentation, as "hallmarks of its cutting edge technology". It is all part of JSW's 'monozukuri' corporate value of achieving excellence in manufacturing, "the prime element in JSW's DNA". This results in outstanding products, innovative solutions and always providing superb service.

A feeding equipment producer has also been lined up to talk about its equipment. Further presentations are planned - by a producer of plastic materials and liquids handling plants, such conveyors and silos, as well as one by a bagging & packing machinery producer.



Tadashi Gion,
JSW Sales

► info_machinery@jsw.co.jp

Fakuma 2017 – Materials, Technologies, Tools

■ 25 years of the Fakuma international trade fair for plastics processing are above all 25 years of plastics technologies and the products which result from them, as well as their use in a great variety of consumer goods and industry sectors. But 25 years of the Fakuma are also significantly more than two decades of consistent commitment to plastics and plastics processing, and thus to the acceptance of plastics in a continuously and rapidly changing work world and environment. Plastics have been in vogue again as of no later than the (re)discovery of resource conservation, and above all due to the once again increasing substitution of plastics for conventional metallic materials – especially in light of the fact that a great deal has also been done in the area of energy efficiency where the industrial processing of plastics is concerned.

Micro injection moulding, 2-component and multi-component processes, process and functions integration by means of creative tooling design, CFRP lightweight engineering and significantly reduced material consumption thanks to design in accordance with actual application requirements and thin-walled layouts, new dimensions of extrusion precision, thermoforming with previously unknown levels of reproducible accuracy, and finally 3D printing as well as generative/additive manufacturing to an extent which has been inconceivable until just recently – the world of plastics applications and plastics processing is more dynamic than ever, which is demonstrated not least of all by the very large number of exhibitors who have registered for Fakuma 2017. Just less than a year before the next Fakuma opens its doors, the international trade fair for plastics processing is in top form and will once

again occupy all available exhibition floor space at the ultramodern trade fair centre in Friedrichshafen on Lake Constance – as has also been the case in recent years. Fakuma project manager Annemarie Schur with regard to the current bookings and occupancy situation at the exhibition centre: "We've already allocated 915,000 square feet of overall floor space and are assuming that we will again have roughly 1700 exhibitors in 2017. Not only will all of the European and global market leaders be on hand – the big players from Asia will demonstrate increased presence as well. Numerous mid-sized companies from all of the industrialised nations and emerging countries will also be on hand, so that we'll be able to present products and services from distributors and manufacturers from all over the world to the expert visitors."

In addition to the growing electrification of drive units for injection moulding machines, attention will also be focused on the consistent automation of production and material flow, as well as the ability to integrate components, modules, subsystems and equipment into I 4.0 structures at Fakuma 2017. Digitalisation is of course advancing as well in the field of automated plastics processing and is affecting all process steps beginning with CAD and design engineering, through production, quality assurance, further processing and packaging, right on up to logistics and distribution based on actual requirements.

► www.fakuma-messe.de/en/fakuma/

Eric Gulnac Named Continuous Improvement Manager at Conair

■ Eric Gulnac, a 21-year veteran of The Conair Group, has been promoted to Continuous Improvement Manager. In his new role, Gulnac will leverage his Conair and plastics industry knowledge to execute cross-functional projects that continue to simplify, streamline, and scale-up Conair's internal capabilities for handling sales, service, and support matters in ways that improve the customer experience and enhance customer relationships. Since joining Conair in 1995, Eric Gulnac has held a variety of positions in shipping and parts sales, as an account manager,



Eric Gulnac

and as an independent Conair sales representative covering the Pennsylvania and Eastern New York territories. He helped to start up the Conair BuyNow online store and was named E-Sales Manager in 2009, before being promoted to Director of Inside Sales in 2011. In that capacity, he led the team that handled customer inquiries and quotation for auxiliary equipment and systems sold in North America. He served in the United States Army before joining Conair.

"Because of his two decades of experience with Conair and our customers, Eric Gulnac is well suited to take on new responsibilities for optimizing Conair's customer-facing services," says Conair President Larry Doyle. "Service and support have always been central to the Conair brand. Now, Eric will lead continuous improvement efforts to enhance the Conair customer experience in every facet of our processes, from initial contact and quoting, to engineering, service, and long-term support."

► www.conairgroup.com

Hygienic mixer with pivoted flap

■ Synutra, one of the most important Chinese producers of baby food, has erected a "greenfield" plant in Carhaix, France. For this purpose Dinnissen has implemented a complete dry mix plant. Dinnissen delivered due to their "lean gravity mixing concept" a wholistic concept for 14 T/h baby food, corresponding to the latest technology in the matter of hygiene and quick cleaning.

Synutra looked for a mixer with a capacity of 6500 liter, with the highest hygiene requirements. Dinnissen designed a special layout for this, at which the cleaning of the mixer and the mixer hopper is guaranteed even beneath the wheel-away shafts. They developed a Pegasus® mixer with a capacity of 6500 liter with big pivoted flaps, that allow an easy access to all components of the mixer that have to get cleaned. Hereby the mixer can get cleaned fast and thoroughly.

In the mixer there are the well-known double shafts, which are rotating contrarious. This creates a fluidized mixing zone and a very homogeneous mixing result, in short time without product damage and with a minimal energy consumption. Beyond that the mixer is completely made in RVS.

The mixer is feeded from six big bag emptying stations with Dinnissen feeder valves. The big bags are conveyed from level 0 to level 4 with a lift, then they are carried to one of the



emptying stations. The outside of the big bags gets cleaned at arrival in the hygiene zone. There is also a conveying, dosing and bag emptying for microcomponents for dosing them into the mixer. There are also a sieve and a metal detector, to guarantee the purity of the product. After that the product can be packed in the packaging line.

► www.dinnissen.nl

Materials handling – advanced innovations to be distinguished

■ motan holding gmbh has announced and honoured the winners of the competition mia – motan innovation award 2016 – which began roughly 10 months ago. A top-class jury evaluated in advance the nominated solutions intensively and detailed in regards to level of innovation, relevance for practical application in the plastics industry, and technical feasibility and market potential within materials handling. Instead of the usual three, four innovations for different functions of material logistics and handling have made it onto the podium: Along with first and second place, the jury awarded two third places. Prize money of over 20.000 euro was donated by motan holding gmbh.

1st place: Ludwig Reissner. With the Matrixkoppler, an automated material station for small conveying systems, Ludwig Reissner has made material changes even more efficient and safe. Conventional material stations require manual switching of the hoses leading to the material loaders during material changes. The Matrixkoppler automated the material allocation with a newly designed multiple switch. This way, contamination from neighbouring lines can be prevented.

2nd place: Team Fabian Kienzler. Together with Arnulf Hörtnagl, Marc Hieffer, and Oscar Lattner, Fabian Kienzler has developed an alternative method for drying of granules. At the core of the innovation is the use of an inductive heating element – for energy transfer via radiation. Here, pre-warmed air flows through the granules to extract moisture. This new automated drying is efficient and can be controlled precisely. The idea was born while searching for a dew point sensor.

3rd place: Peter Haupt. Energy which is used for drying and dosing in usual material flow constellations, is used more than once by the dry dosing unit developed by Peter Haupt. The idea is focussed on dramatically reducing energy consumption – and therefore costs. Operation can then also be designed more ergonomically.

3rd place: Karl Wolfgang. Better utilisation of material and increased cleanliness are the benefits of using the Octa-Flow-Bag by Karl Wolfgang. If octabins are emptied with an automated conveying system in production, then material normally remains in the corners and must be sucked out manually. This new development transports remaining material automatically into the middle of the octabin, where it can be removed easily.

The prizes were awarded by Sandra Füllsack, CEO of motan holding gmbh, as well as the four jury members. The submissions for the next mia 2018 awards will start in January 2017 and the prize giving ceremony will take place in two years' time at the Fakuma exhibition in October 2018 in Friedrichshafen.



Trophy of mia innovation award mia 2016 (image: motan)

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aluplast and Greiner celebrate 500th extrusion tool

■ Top quality products in profile extrusion—that is what has defined collaboration between the two companies aluplast and Greiner Extrusion since the 1970s. aluplast is a leading window profile manufacturer with 24 production and distribution locations worldwide. Greiner Extrusion is a technology leader for tooling and machines for profile extrusion and part of the Greiner Extrusion Group with 10 locations worldwide.

Success story

aluplast and Greiner Extrusion have been partners in developing solutions for profile extrusion for almost four decades. The spectrum of collaboration between the two companies is very broad, ranging from extrusion tooling, downstream equipment and co-extruders to the installation of new production locations. Recently, they celebrated their 500th extrusion tool that has been successfully commissioned. “We particularly value the high quality of the products from Greiner, as well as their ability to continuously accommodate the requirements of our production,” says Stefen Walter, Technical Director at aluplast.

Exploiting expertise

Major factors in their success with top-quality products are the innovative strength of the companies and their ability to exploit supplier expertise by linking it to specific customer requirements. Thus they can develop solutions with significant advantages. “It is our job to deliver and preserve decisive performance advantages in profile extrusion for our customers. The key for this is a broad and deep mutual understanding between the specialists on the side of the user on the one hand and of the supplier on the other. That is precisely what has



made the partnership between aluplast and Greiner Extrusion such a success story,” says Gerhard Ohler, CEO of the Greiner Extrusion Group.

Perfect match

Innovations become a success when customer requirements are linked with the best possible technology and individual solutions are created in close collaboration with the customer. “Highly qualified extrusion specialists, both on the side of the extruder and the system supplier, can only develop a good solution when all are prepared to engage in an open exchange of ideas, inspiring each other to meet the challenge. The long-standing collaboration with aluplast is a prime example of this,” emphasizes Oliver Beer, Managing Director of Greiner Extrusion GmbH.

► www.greiner-extrusion-group.com,
www.greiner.at, www.aluplast.net

Maguire partners with Syncro

■ At K 2016, Maguire Products, Inc. and SYNCRO srl announced a partnership to provide customers of both companies with an extensive platform of options for materials and extrusion control. Maguire has taken an investment position with SYNCRO that will lead to a portfolio of technologies drawing on Maguire’s experience in materials handling and blending systems, and SYNCRO’s extensive range of control systems for extrusion applications.

To suggest the new possibilities, Maguire is displaying an extrusion control interface at K 2016, with examples of a 7- and 21-in. HMI alongside a new range of Maguire® blending systems, the WXB™ series, which combine batch functionality with loss in weight control. SYNCRO will display its full range of extrusion control-related equipment and systems.

Through its company CTS, SYNCRO also offers core expertise and a full product range for powder. “Powder applications



are growing and diversifying from core compounding to other broader areas of extrusion markets that are served by both Maguire and Syncro,” said Gabriele Caccia, CEO of SYNCRO. “With this the new partnership we will also be able to offer many more options for customers focused on powder applications, from individual components to complete turn-key solutions.”

► www.maguire.com, www.syncro-group.it



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Blown film lines with the EVOLUTION Ultra Flat film flattening unit from Reifenhäuser Blown Film are on the road to success: The company has installed further lines in North America where superior reel quality is becoming a crucial selling point. Thanks to the unique technology new buyers can be won over, confirmed Reifenhäuser customer BJK Flexible Packaging, at the "Rethinking Day".

A new Reifenhäuser EVOLUTION Blown film line was taken into operation at BJK in record time of only one week

EVOLUTION Ultra Flat convince the North American market

"We produce the flattest films throughout North America", explained Brian Krein, chairman and CEO of the US-based specialty films producer BJK Flexible Packaging at the "Rethinking Day" event held by Reifenhäuser Blown Film GmbH in Troisdorf. With his statement, he confirmed the increasing quality awareness of producers and buyers of value-added multi-layer blown films in North America. Furthermore, Mr Krein clearly expressed in his lecture that highest production efficiency and high film quality are not contradictory with Reifenhäuser EVOLUTION blown film lines - on the contrary: BJK's CEO explained the guests invited to the Reifenhäuser event that, thanks to the "perfect quality" of rollgoods, his company was definitely able to win over new customers who in the past bought their semi-finished products from other manufacturers. And Steve DeSpain, Sales Director at Reifenhäuser Inc., USA, added: "Our success story in North America is just starting to gather pace thanks to the EVOLUTION Ultra Flat film flattening technology. Not long ago, we successfully installed further lines here and brought them onstream in the shortest possible time." According to DeSpain, other promising orders are already in sight.

In early summer of this year, a second Reifenhäuser EVOLUTION blown film line "made in Germany" was taken into operation at BJK, a manufacturer of semi-finished film products, in record time of only one week, lead-managed by Reifenhäuser Inc. The 5-layer EVOLUTION high-performance line features both Ultra Flat technology and Ultra Cool high-efficiency cooling technology. Five 60mm extruders with 400mm blown film die-head diameter enable an output of more than 600kg/h. BJK mainly runs high-quality PE composite films on the line which is equipped

with a fully automatic multi-function winder (EVOLUTION W-P 2200.2), and a shaft and roll handling system.

Ultra Cool is a user-friendly, flexible high-performance cooling system that directly contributes to higher output of blown film; and the Ultra Flat component is a simple-to-operate film flattening system integrated in the film haul-off for increased efficiency in conversion operations.

The system is able to correct and completely eliminate film flatness imperfections that may occur in the bubble collapsing unit or are due to the basic structure of the various raw materials used for the production of complex blown films. Thus Ultra Flat provides flat film that runs smoothly through downstream systems, such as printing presses and bag making machines. This ensures higher efficiency and enhanced product quality.

A further EVOLUTION line, also equipped with Ultra Flat and Ultra Cool technologies, was successfully taken into operation at Packaging Personified Inc. in Sparta, Michigan, last June. The company headquartered in Carol Stream, Illinois, mainly produces lamination film and high-quality print film on its new 3-layer blown film line. These products require superior roll quality which is key in downstream converting operations. "This offers our customers a hassle-free conversion of their films, be it lamination, printing, reforming, packing or sealing. The entire value chain in the packaging industry benefits from the enhanced efficiency provided by perfectly flat films produced on Reifenhäuser Blown Film lines," was Packaging Personified's statement highlighting the cooperation with the Troisdorf-based company.

► www.reifenhäuser.com

Intelligent Machines Bring Packaging 4.0 to Life

Trade show premiere: Live job changeover with both size and color changes seen distinctly on the reel. W&H is the first and only machine manufacturer to show live changeovers at a trade show



The K 2016 proved beyond expectation for W&H with more than 10,000 visitors to the booth and 1,001 guests making the trip to company headquarters in Lengerich for an in-house EXPO. Positive feedback on the technological innovations and a large number of orders made the show a huge success for W&H.



The EXPO at company headquarters in Lengerich comprised 10 running machines, including the new FILMEX II cast film line with Film Performance Monitor (FPM)



Three machines at K – VAREX II, OPTIMEX and the CONVERTEX from subsidiary, W&H Machinery, attracted a record number of visitors to the booth

Trade show premiere: Live job changeover with both size and color changes seen distinctly on the reel. W&H is the first and only machine manufacturer to show live changeovers at a trade show



„We are overwhelmed by the positive reaction of our customers from all over the world. We are incredibly pleased that so many existing and potential customers took the time to visit both our booth at K and the EXPO in Lengerich, just five months after drupa,” said Managing Director, Peter Steinbeck, who is anticipating heavy post-show activity. The highlight on display in Düsseldorf was the 5-layer VAREX II blown film line running the intelligent TURBOCLEAN automation module. W&H is the first and only blown film machinery manufacturer to demonstrate complete job changeovers, including changing seven components, film width, thickness and color at a show, and all of that 3x a day. “With

the demonstration of a 12-minute job change, we made Packaging 4.0 real for our visitors,” said Dr. Jürgen Vutz, CEO. “We ran an entertaining video that made clear how intelligent machinery can have a positive impact on the efficiency and economics of production, with our example showing an 6% increase in machine uptime.” Visitors to the in-house EXPO in Lengerich were able to gain insight into the complete spectrum of machinery by W&H from extrusion to printing to converting. The big highlight was the newly launched FILMEX II cast film line for the manufacture of stretch, CPP and barrier films. The line ran a 2,700 mm asymmetrical barrier film for deep draw applications. The new FILM PERFORMANCE

MONITOR (FPM), integrated into the automation of the FILMEX II allows for consistent and reproducible film quality and is a perfect example of Packaging 4.0.

“Innovation from W&H and its effect on end applications could be seen on the three machines at the K 2016 booth and the 10 machines running at the in-house EXPO. The sheer number of visitors, closed contracts and new contacts tell us that we’re on the right track. K 2016 was a complete success for W&H,” concludes Steinbeck.

Combined system competence in the field of circular economy in the plastics processing industry: Manfred Hackl, CEO of EREMA GmbH and Peter Roos, President of the Extrusion Technology Segment of the KraussMaffei Group



KraussMaffei Berstorff and Austrian EREMA Engineering Recycling Maschinen und Anlagen GmbH aim at developing a successful customer/supplier partnership in the field of plastics recycling lines in order to enhance the circular economy growth potential in the plastics industry.

Focus on growth potentials in plastics recycling

- KraussMaffei Berstorff selects EREMA as new supplier for high-quality recycling systems
- Reduced energy consumption during recycling

KraussMaffei Berstorff selects EREMA as new supplier for high-quality recycling systems

The profound know-how and wealth of experience of both companies ideally complement each other: while EREMA is the well-positioned world market leader in plastics recycling, KraussMaffei Berstorff counts among the most important manufacturers of compounding machinery and system solutions at international scale. "The perfect portfolio combination of both partners clearly demonstrates that integrated recycling and compounding – or rather re-compounding – has become a key element of our strategic orientation," says Peter Roos, President of the Extrusion Technology Segment of the KraussMaffei Group.

Reduced energy consumption during recycling

The re-compounding technology – also known as KraussMaffei Berstorff "EdelweissCompounding" – offers clear customer benefits in terms of energy efficiency and final product quality. With this solution, a first extruder is used for melting the reclaimed material before it is compounded on a second extruder. Owing to the integrated process on a single line of tandem configuration, the material processed need not be heated repeatedly, which saves ener-

gy, minimizes the shear stress produced during plasticizing and thus gives substantially improved material quality.

In addition, the re-compounding technology ensures enormous added value for processors. While recycling companies are in a position to offer premium quality customized compounds, compounding companies can use cost-effective reclaimed material.

"We are extremely pleased that KraussMaffei Berstorff – a global player in the plastics processing industry with an extensive product portfolio that is likely to promote the use of reclaimed material with benchmark effect – has selected our INTAREMA technology for its recycling solutions," says Manfred Hackl, CEO of EREMA GmbH.

"The EREMA technology enables us to offer our customers a line concept that stands out for unparalleled productivity and uncompromising reliability," adds Peter Roos. "In the first quarter of 2017, this new solution can be thoroughly tested as the first line rated for outputs between 300 and 1000 kg/h will be available for customer trials."

► www.kraussmaffeiberstorff.com



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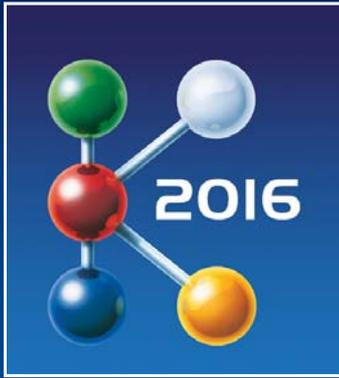
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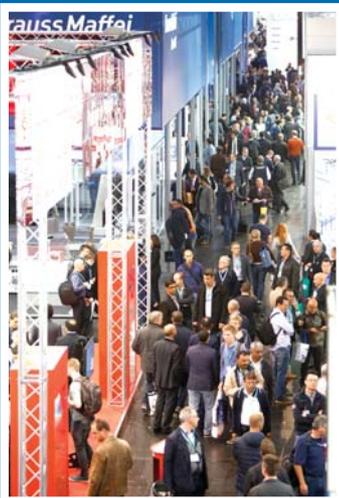
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The international plastics and rubber industry presents itself in top shape. It benefits from a globally growing end-user market with high quality demands and stands for impressive innovative power across the entire value chain.

The extraordinarily good economic state of this sector and the positive outlook for the future characterised the world's biggest trade fair for the industry and made for an excellent mood amongst the 3,285 exhibitors of K 2016 in Düsseldorf.

Companies reported a host of new leads, many of which already led to closed deals over the eight days of the trade fair.



Thank you & goodbye K 2016!

Delighting at the results Ulrich Reifenhäuser, Chairman of the K 2016 Advisory Board, says: "I have never seen such a vast number of decisive customers willing to buy at a trade fair before! The number and magnitude of deals, some of which were concluded here spontaneously, as well as the many concrete enquiries about new projects by far exceed our expectations! It was clear from day one that customers wanted to not only find out about new technologies but also purchase them. There is strong investment in all our customer industries and in all regions of the world."

This assessment held true for all ranges on offer at the trade fair. Exhibitors unanimously confirmed that trade visitors were extremely serious about their business negotiations and showed a pronounced willingness to invest. Furthermore, they emphasised the again higher percentage of international visitors and their very high degree of professional expertise as well as the fact that a disproportionately high number of top managers and company owners had come to Düsseldorf.

230,000 trade visitors from over 160 countries were welcomed to the exhibition halls over the eight days of K 2016. Werner Matthias Dornscheidt, President & CEO of Messe Düsseldorf, says: "Just the sheer number of experts visiting K 2016 impressively confirm the appeal and importance of the trade fair – since this number is once again clearly higher than at the previous event in 2013. However, what is more important: the breakdown of trade visitors was of an exceedingly high standard. We can register a constantly good level of demand from Germany and a disproportionately high level of interest from abroad, especially from overseas. It is known the world over that K in Düsseldorf is THE innovation platform for the entire sector. A visit here is simply indispensable for everyone wanting to stay ahead of the competition."

The previous event in 2013 was attended by 218,000 visitors and 3,220 exhibitors.

The results from the visitor survey underpin the exhibitors' view that the proportion of international guests has risen once again: some 70% came from abroad. More than 40% of all foreign visitors hailed from overseas – even from as far-away places as Bangladesh, Costa Rica, Ethiopia, the Ivory Coast, Jamaica, Oman, Madagascar, Mauritius, Surinam and Togo they travelled to the Rhine. As expected, the experts from Asia accounted for

*Chairman of the K 2016
Advisory Board
Ulrich Reifenhäuser*



the largest group among foreign guests, which grew yet again: nearly 30,000 experts came from South, East and Central Asia. Guests from India again constituted the biggest group here but the number of visitors from China, South Korea and Iran also rose significantly.

Almost on a par remained the proportion of visitors from the USA and Canada with some 6% of all foreign visitors. Regarding guests from the neighbouring European countries Italy dominated with over 10,000 visitors followed by the Netherlands (some 9,500), France (some 6,700), Belgium (some 6,300), Spain and Poland (some 5,000 each). There was perceptibly stronger interest taken by Turkey, Hungary and Greece.

Across all country borders the percentage of executives among trade visitors is extraordinarily high. Some two thirds are top managers or are in middle management. Almost 60% have the final word on, or are decisively involved in, their companies' investment decisions. K plays an outstanding role in deciding which investment will be made: almost half the visitors stated that they waited for the trade fair before realising any purchasing projects.

Exhibitors in all exhibition segments had prepared for K 2016 for months in order to face international competition with convincing innovations. And they met with enormous approval: trade visitors were thrilled with the wealth of new technical developments presented to them by raw materials producers, machine manufacturers and producers of semi-finished and technical parts. Over 70% of visitors confirmed having received infor-



mation on news and trends. By their own accounts, numerous visitors wish to immediately convert these new insights in investment: 60% of industry decision-makers said they had visited the trade fair with concrete intentions to buy while 58% had already found new suppliers. With these new purchases visitors first and foremost pursued three objectives for their enterprises: expand their product portfolio, extend production capacity and increase efficiency. The results of the visitor survey also confirm the positive business situation in the downstream sectors of the plastics and rubber industries: 60% of the visitors polled rate the current situation as "very good" and "good" while the same percentage even expect the situation to improve over the next twelve months.

Energy, material and resource efficiency were the dominating themes at K 2016. Also meeting with avid interest were new materials, innovative recycling concepts, new application areas for organic plastics and additive manufacturing. Smart, quick and flexible lines and services were in high demand among customers; Industry 4.0 dominated not only lectures and discussions but was also demonstrated hands-on

at many stands. Commenting on this Ulrich Reifenhäuser said: "The possibilities the Internet of Things brings stimulates strong, serious interest – especially among younger, IT-savvy customers from throughout the world. Industry 4.0 is a theme of the future that will keep us busy for years to come." Machine and plant manufacturing, which occupies the biggest exhibition area at K 2016 with over 1,900 exhibitors, was also the centre of attraction for visitors; a good two thirds of all experts polled ranked this segment first. 46% said they were predominantly interested in raw and auxiliary materials, while for 25% semi-finished products and technical parts made of plastic and rubber were the main reason for coming (multiple choice possible). Albeit the smaller sector of the two, the rubber industry made a highly visible appearance at K 2016 and underscored its importance in the areas of mobility, leisure, household and energy.

Visitors came from all important user industries – from the construction sector and automotive to packaging and electrical as well as medical device technology not forgetting agriculture. They all again gave top scores to the ranges on display in the 19 exhibition halls: 97% ensured that

they had reached their goals 100% while 96% said they were impressed with the line-up at K 2016.

Also going down well with the experts from throughout the world was the line-up of accompanying events at K 2016, especially the Special Show "Plastics shape the future" and the Science Campus. The Special Show, a central forum for swapping information, thoughts and opinions in Hall 6, complemented the exhibits at K for the ninth time now. This year saw individual themed days illustrate the impact plastics have on shaping modern living environments. The agenda featured both expert discussions and entertaining presentations and sports activities as well as exciting experiments. At the Science Campus exhibitors and visitors to K 2016 obtained a focused overview of scientific activities and results in the plastics and rubber sectors and were given the opportunity to make contact with numerous universities, institutes and sponsoring organisations. The next K in Düsseldorf will take place from 16 to 23 October 2019.

www.k-online.com



www.illig.de

Great event for AMUT GROUP



K 2016 turned again into a great event for AMUT GROUP who has once more impressively catch the interest of hundreds international customers.

The new generation of stretch film lines – ADB POWER – left a lasting mark in the world of flexible packaging: 1000 mt/min production speed has been achieved for the first time ever, under the incredulous and amazed look of the visitors. The line in daily operation was a 2 meter net width (4-up) for production of hand and machine rolls of super power stretch film, 7 layers and 1600 kg/h net output. It is equipped with a special fast winder, twin type chill roll of incomparable mild-cooling capacity and 6 extruders - new concept 40 L/D designed for low-energy consumption and an in-line trims reprocessing with orbital mixer/intruder. 3 levels vertical is the lay-out designed for floor space savings.

The technology applied on this new series is totally dedicated and developed for stretch film production.

AMUT GROUP first-mover also in testing new materials on the thermoforming sector: PP foam technology has been now applied on in-line configuration plants with the updated model PA980. This model can be described with the

claim 1x4 technology, 1 machine for 4 materials, underling its flexibility in handling a variety of materials, such as PP filled, PP foam, HIPS and Mater-BI. The machine exposed in Düsseldorf has been sold during the fair to an European thermoformer player also and especially for this clear advantage.

The all-new 8-colour flexo gearless press TELIA FSC HS was in demo 3 times per day, printing high quality jobs, performing fast-job-change and showing to the potential customers how it is possible, when changing a job, to minimize the scrap of the substrates to be printed during the start up.

The new version of the TELIA press has been especially designed for the short / medium runs, includes a new and an improved version of the FSC system and it is equipped with 100% print defect control, viscosity control system and fully automatic wash up system.

► www.amutgroup.com

EREMA recycles 30 tonnes of plastic waste live

Opening of the CAREFORMANCE Recycling Centre (from left to right: Manfred Hackl (CEO, EREMA Group), Alexandre Dangis (Managing Director, European Plastics Converters), Ton Emans (President, Plastics Recyclers Europe) and Alfred Stern (Executive Vice President Polyolefins and Innovation & Technology, Borealis) (Photo credit: EREMA)



The CAREFORMANCE Recycling Centre was opened in the outdoor area with high-ranking representatives of Plastics Recyclers Europe (PRE), European Plastics Converters (EuPC) and Borealis with "We recycle the K" as the guiding principle. Over 30 tonnes of plastic waste accumulated at the trade fair was been processed live during the show on EREMA's recycling system to make high-grade recyclates.

Manfred Hackl of EREMA, Alfred Stern of Borealis, Ton Emans of PRE and Alexandre Dangis of EuPC all pressed the buzzer together for the grand opening of the Recycling Centre at the K trade fair. The joint presence of representatives of raw material producers, processors and recyclers is a strong signal. "The collaboration of the entire 'plastic' value chain has become more intensive in recent years and results in terms of product innovations – particularly in the case of recycling projects – deserve a special platform at K," emphasises Manfred Hackl, CEO of EREMA.

Recycling 4.0 live

EREMA recycled over 30 tonnes of plastic waste live on an INTAREMA TVEplus 1108 recycling system during the K show. At the same time EREMA presented the first Industry 4.0 package in the field of plastics recycling, with the trade fair motto of CAREFORMANCE. "Building on the Smart Start package presented at K 2013 and the Intarema systems' high degree of automation connected with it, EREMA has developed a Smart Factory package for producers and recyclers. On the one hand, the process data of the individual machines is analysed and, on the other, the production and recycling facilities are interconnected with the entire process chain," explains Manfred Hackl.

Visitors could judge for themselves the online measuring equipment, analysis and evaluation tools of CAREFOR-



MANCE: the machine, quality and process data of the recycling process was been relayed in real time directly from the Recycling Centre to EREMA's booth in Hall 9 (Stand C05). Manfred Hackl is confident that this digital quality proof will further increase the amount of recyclate used in the production of plastics. Trade fair visitors saw once and for all at the exhibition of the highly innovative products how many branches of industry already rely on recycling. The exhibition in the Recycling Centre was organised by EREMA in cooperation with customers and PRE. The portfolio ranges from food-contact-compliant articles such as rPET drinks bottles and technical injection-moulded and modern packaging materials to lifestyle products such as sunglasses and skateboards.

Premiere for 100 per cent recyclable plastics packaging
 Participants saw a convincing premiere in the sustainable production of plastics packaging at the opening ceremony: Borealis, Hosokawa Alpine, Bobst, GEA and EREMA presented the latest developments in the production of recyclable stand-up pouches. This collaboration of the companies makes it possible for the first time to produce pouches with a material combination based exclusively on PE. The companies involved demonstrate impressively how the closed plastic loop works: the pouches produced on site – including any production waste – are likewise recycled live and the recyclates processed directly on an OCS extruder to make blown film. Visitors could, therefore, judge the quality of the film made from the recycled PE pouches for themselves. Additionally, this recyclate was used prior to the K trade fair to make carrier bags too as a giveaway at the show. "I like to compare the plastic loop to a relay race. It is not enough if a part of the value chain thinks only in terms of their processing step. Every manufacturer or processor of plastics has to think one step further to reach the finish line successfully together," says Manfred Hackl.





New technologies and demonstration of the innovative power

This year again, K 2016 attracted trade visitors and experts in extrusion from around the world to Düsseldorf. At the world's most important trade show for the plastics industry, the Reifenhäuser Group unveiled progressive extrusion technology to international specialists under the motto "Setting The New Standards", and provided once again proof of its innovativeness. In this regard Reifenhäuser continues its strategy of "Rethinking Technology". The company has clearly matured its technologies since the last K show – with significant success, so it was presented results at this year's K: "Setting The New Standards" stands for extrusion technology beyond the current state of the art.

“Setting The New Standards” is a clear statement of the world’s leading provider of plastics extrusion lines and components. “In the development of products we keep on questioning ourselves. We constantly look for new progressive approaches and like to think outside the box. This is how we develop genuine innovations,” describes CEO Bernd Reifenhäuser the corporate philosophy. The result is technology matured even further and new standards with clear competitive advantages in the production of lines for high-quality blown films, sheets, cast films, monofilaments, strapping tapes and nonwovens. “Our technologies will allow our customers to set new standards and gain a competitive advantage also in their industries.”

Reifenhäuser underlines its technological leadership “We will set our competitive edge and game-changing optimization of line details successfully in scene – also without lines in operation, but with virtual highlights and a digital performance in all our Business Units instead,” emphasizes Managing Director Ulrich Reifenhäuser.

The performance was continued in the Troisdorf headquarters: On over 5,000 sqm Reifenhäuser presented lots of know-how, an impressive technology package of a total of nine lines running in production on three open house days. Interested visitors can still register

during the fair, including for guided plant tours.

“Our customers want the newest line technology for an efficient production, but more and more, they also take a broader view,” says Ulrich Reifenhäuser. The customers must be prepared for the future. This is essential and the reason why we decided for a novelty on our fair stand: the “Rethink Tank”. A kind of innovation corner, where Reifenhäuser presents innovations that are still in the pipeline. The idea behind: Reifenhäuser enters into more detailed discussion, wants to find out what is moving its customers and whether the company’s developments are really in tune with the times. “For this we take our time and give room”, explains Ulrich Reifenhäuser. At the Rethink Tank the Extrusioneers invite to talk sessions in order to look at new technology ideas from different perspectives – to lead the way for New Standards in the future.

Highlights presented on the Reifenhäuser fair stand:

4.0 à la Reifenhäuser: With its Digital Business Platform Reifenhäuser paves its customers the way to intelligent production. On show was been the novelties of a unique digital architecture.

Reifenhäuser Cast Sheet Coating showcases the RElcofeed 2.2 coextrusion feedblock and the



optimized polishing stack of the MIREX-MT-H model type.

Reifenhäuser Reicofil presented its newly developed High Loft process setting the new standard for voluminous nonwovens. In addition, it was demonstrated innovative solutions for packaging bulk materials with nonwovens.

Reifenhäuser Blown Film debuted in Düsseldorf a new line generation under the name of “EVO”, and presented technologies for a quality in film flatness and stretching never seen before.

Reifenhäuser Blown Film Polyrema presented optimized machine technology for the production of PE films, novel bio films as a response to national bans on PE plastic bags, and barrier and high-barrier films.

Reimotec unveiled newly developed measuring systems for monofilament and strapping tape lines.

„Following our message Setting The New Standards we present game changing technologies at the K show“, describes Bernd Reifenhäuser the company’s presentation at the fair. “Reifenhäuser is pushing the limits with its new technology highlights and innovative solutions”.

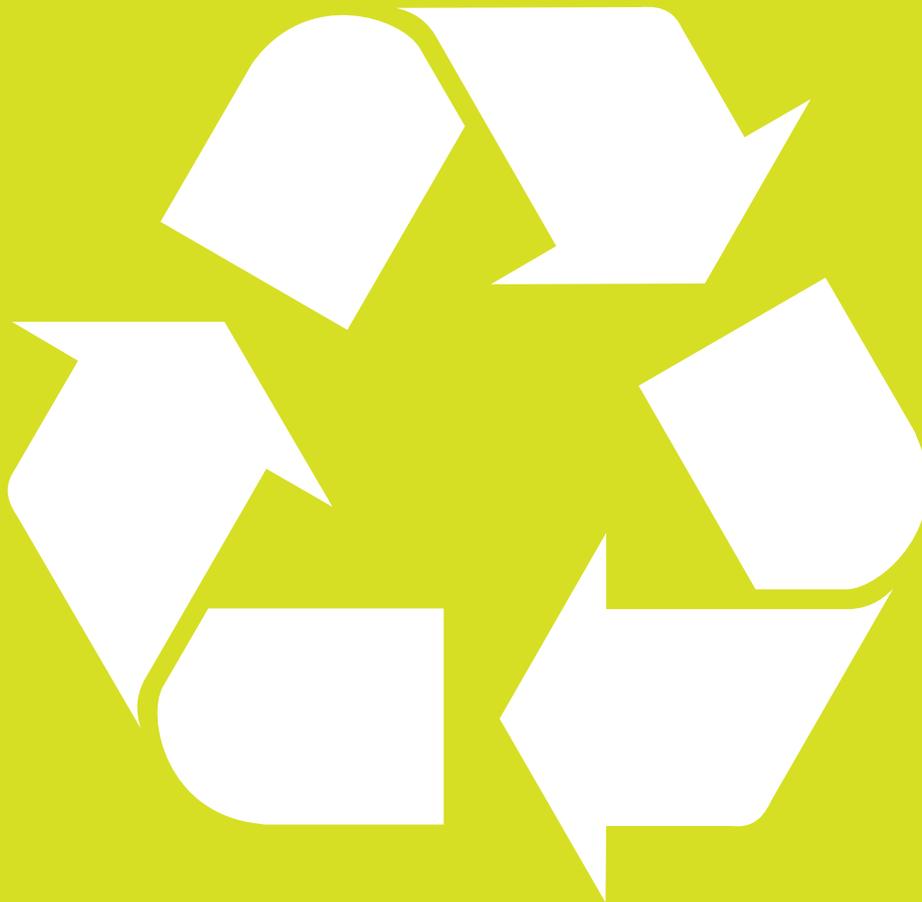
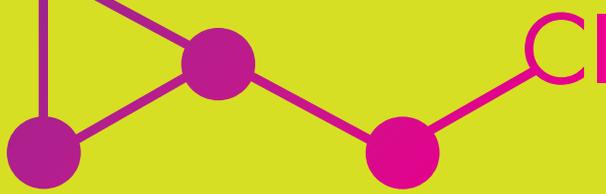


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The patent-pending R-PRO™ dense-phase vacuum-conveying system developed by Conair to minimize pellet fracturing, “angel hair” and equipment wear caused by conventional dilute-phase conveying, will make its first appearance at a European tradeshow when Conair will present at K 2016 the results of R&D efforts aimed at taking advantage of the fact that the system can be “tuned” to match material speed to application requirements and the characteristics of the material being conveyed. Other innovations on display will include a new FLX-128 Plus conveying control, which now can be set up to operate the R-PRO system, a new Mobile Drying/Conveying (MDC) system with standard color touchscreen control interface, and several examples of equipment from Conair’s new MedLine® range of clean-room-ready auxiliaries.



R-PRO test apparatus installed at Conair Technical Center

Variable-Speed Capability Gives Users New Options

When the Conair R-PRO® [Resin-PROtection] conveying system was first introduced a year ago, the focus was on slow-speed dense-phase conveying, which eliminates pellet fracturing, dust, “angel hair,” equipment wear and other problems caused by conventional high-speed vacuum conveying. However, Doug Brewster, Conveying Product Manager, and the inventor of the system, says R PRO is not only capable of running at low speeds. It can also operate in the more conventional dilute phase, with individual pellets fully suspended in the high-speed air... or at any speed in between. He reports that, as material speed increases, there is a gradual transition from dense phase to dilute phase, and “we have found we can control that transition very effectively and run right on the edge in a sort of mixed pulse phase. We think we can use this for higher-volume unloading where more airflow may be desirable but truly high-speed operation is not necessary or desirable.”

In slow-speed, dense-phase conveying, pellets move in compact slugs of material at speeds between 300 ft/min (91.5 m/min) up to 1200 ft/min (366 m/min). In conventional high-speed conveying, 4500 ft/min (1372 m/min) is a typical low speed and air speeds up to 6000 ft/minute (829 m/min) are not uncommon.

Response to this innovation has been very positive, especially since conveying throughput and distances are comparable to high-speed systems. In addition, since R-PRO uses standard deep-vacuum pumps, conveying tubes and material receivers, the system costs only a little more than conventional systems and can be easily retrofitted to existing systems.

The variable-speed capabilities of R-PRO now give processors the flexibility to tune the system to their exact needs. For highly abrasive glass- and mineral-filled materials, Brewster says, the slowest material speeds are “absolutely the best.” However, he continues, “we are finding that

we can run at higher speeds with some materials and still avoid a lot of the usual problems. This can be a big advantage for unloading bulk trucks and railcars where more airflow is helpful."

He suggests this mid-range speed would be good with materials like PET and acrylic, which are only mildly abrasive, or with light-bulk-density materials (e.g.: 15 lb/cu ft), like PE sheet flake. "It's really easy to raise or lower material speed and airflow," Brewster says, "and we can do it with great precision and control. The great news is the flexibility that the R-Pro system provides. The customer can set up and store programs (up to ten per receiver station) and convey different materials at different speeds." The new FLX-128 Plus system, which will be set up to control the R-PRO demonstration, is scalable and has all the same features that made the previous web-enabled FLX-128 Conair's most popular conveying system control, but now is smarter, faster, and more powerful. It not only can control R-PRO systems, but also integrates Conair's newest line-proofing systems including the Invisible Line Proofing (ILP) system mentioned below. The FLX-128 Plus flexible control system utilizes a combination of centralized I/O and expansion modules, interconnected via industrial Ethernet to provide control of up to 128 receivers, 40 pumps (plus 2 back-up pumps) and 256 source valves. A full color touch screen with descriptive icons ensures that even with little or no training, any user will be comfortable monitoring or making changes on up to 40 independently operating vacuum systems.

A mobile drying/conveying system (MDCW) will be shown with Conair's newest DC-A touchscreen control interface. The MDCW combines an efficient Carousel® Plus Dryer with a conveying blower, dust collector and direct-feed vacuum receiver to convey dried material to the throat



The new FLX-128 Plus system is smarter, faster, and more powerful



This mobile drying/conveying system (MDCW) is equipped with Conair's newest DC-A touchscreen control interface

of a processing machine – all assembled on a safe, convenient wheeled cart. Featuring intuitive graphical design, with minimal text and no function codes to decipher, the DC A touchscreen control has descriptive help screens for operators and features auto-start capabilities, password protection and has Conair's Drying Monitor capabilities built in. Trending capabilities simplify maintenance and troubleshooting, while providing users with information they can use to optimize drying parameters and save energy. The new DC-A control will also be offered on smaller Conair desiccant-wheel dryers.

The new MedLine® family of clean-room-ready products was developed to help medical plastics processors select, install, commission and start up white rooms and cleanrooms faster and with less paperwork. It includes a complete range of auxiliaries – 40 different models and 170 different configurations in all – for molding and extrusion of medical products. The design of MedLine conveying, storage, drying, blending, heat-transfer and downstream extrusion products are all based on proven Conair designs, but they have been specially sized, configured, documented and supported for use in cleanrooms and other controlled environments.

Conair MedLine products at K 2016 will include a MedLine MicroWheel dryer. Thought to be the smallest desiccant wheel dryers available, they offer an alternative to compressed-air dryers and small twin-tower units, making them ideal choice for medical processors and others running small quantities of expensive engineering resins. The mini dryer will be fitted with a MedLine TubeLoader, a compact, self-contained loader with built-in vacuum motor that can convey 150 lbs/hr (68 kg/hr) nearly 20 ft (6 m).

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