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Bettina Jopp-Witt M.A.
(Editor-in-Chief EXTRUSION, Extrusion International,
Extrusion & Recycling Asia)
T.: +49 221 546 15 39
email: b.jopp-witt@vm-verlag.com, redaktion@vm-verlag.com

VM 出版社有限公司 / 广告与销售
VM Verlag GmbH – Sales + Distribution:
P.O. BOX 50 18 12, D-50978 Cologne, Germany
Dipl.-Ing. Alla Kravets (Administration)
T. : +49 2233 9498793
e-mail: a.kravets@vm-verlag.com
Martina Lerner (Sales)
T.: +49 6226 97 15 15, e-mail: lerner-media@t-online.de
Tanja Bolta (Sales)
T.: +49 15205626122, e-mail: t.bolta@vm-verlag.com

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色母粒工會器官

全球代理 / Representatives:



JAPAN
Tel.: +81 (3) 32732731
extrusion@tokyopr.co.jp



CHINA & ASIA
Tel.: +86 13602785446
maggjeliu@ringiertrade.com
Tel.: +886-913625628
sydneylai@ringiertrade.com
Tel.: +852-9648-2561 octavia@rin-
gier.com.hk

www.extrusion-gobal.com

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NexKemia (NexKemia Petrochemicals Inc.) 公司是可发性聚苯乙烯 (EPS) 制造领域的领军企业，自2020年起一直信赖使用科倍隆 (Coperion) 旗下的的ZSK双螺杆挤出机
NexKemia Petrochemicals Inc., a leading firm in manufacturing expandable polystyrene (EPS), has relied on ZSK twin screw extruders from Coperion since 2020



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德国机械工程公司商细川阿尔派 (Hosokawa Alpine) 推出了实用的系统自动化与数字化解决方案，助力客户更高效、安全且经济地运营吹膜生产线
The German mechanical engineering company Hosokawa Alpine presents practical solutions for system automation and digitalisation that enable customers to operate their blown film lines more efficiently, safely and economically



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仲巴赫电子 (Zumbach Electronic) 近期推出了其最新开发的精密测量技术：QC非接触式离线测量站，这些新技术为电线，电缆和管材样品提供了便捷，精确且可重复性的测量。
Zumbach Electronic has recently unveiled its latest innovation in precision measurement technology: the QC non-contact, off-line measuring stations, designed to deliver fast, accurate, and repeatable measurements for wire, cable, and tube samples.



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德国塑料回收和加工机械及部件制造商格诺斯(Gneuss)将在2026年中国国际塑料展览会(Chinaplas 2026)上展示一系列解决方案，旨在帮助加工商提高运营效率
Gneuss, a German manufacturer of machinery and components for plastics recycling and processing, will present solutions at Chinaplas 2026 to help processors operate more economically





Plastics Recycling Show Europe 2026

05. - 06. 05. 2026
Amsterdam / The Netherlands
www.prseventeurope.com

interpack 2026

07. - 13. 05. 2026
Düsseldorf / Germany
www.interpack.de

Interplas 2026

02. - 04. 06. 2026
Birmingham / United Kingdom
www.interplasuk.com

PLAST Milan

09. - 12. 06. 2026
Milan / Italy
www.plastonline.org

Equiplast

02. - 05. 06. 2026
Barcelona / Spain
www.equiplast.com

SPE Extrusion Optimization TopCon (Topical Conference)

16. - 18. 06. 2026
Quebec / Canada
<http://speextrusiontopxon.technical-content.com>

Fakuma 2026

13. - 17. 10. 2026
Friedrichshafen / Germany
www.fakuma-messe.de

wire India und Tube India 2026

30. 11. - 02. 12. 2026
Mumbai / India
www.wire-india.com
www.tube-india.com

USE 2027

20. - 23. 04. 2027
Düsseldorf / Germany
www.USE-expo.de

包装世界 (上海) 博览会由swop更名为interpack China - 强势品牌开启新篇章



(来源: 杜塞尔多夫展览公司)

(Credit: Messe Düsseldorf)

包装世界 (上海) 博览会 (swop) 已经加入interpack联盟十载-如今也将这一身份体现在其品牌名称中。杜塞尔多夫展览公司 (Messe Düsseldorf) 通过推出interpack China, 进一步壮大了其国际品牌矩阵并对中国包装市场的重要性传递了一个明确信息。

值此十周年纪念日, swop完成了它的战略定位转变并将以新品牌interpack China再创辉煌。全新的品牌已在今年开幕式的开场闪亮登场。依托interpack在全球范围内收获的信任 and 创新能力, interpack China展会将斩获更高的国际影响力。

“interpack联盟是全球范围内, 高品质, 值得信赖, 和强劲伙伴的代名词。新名Interpack China凸显了和interpack的关联性并立竿见影的提升了品牌的辨识度”interpack及interpack联盟总监Thomas Dohse说到, “作为全球品牌的成员, interpack China把全世界与中国企业链接在了一起, 为参展商们打通了一条最精彩的, 高速增长通往世界市场的道路。”

新名字也加强了杜塞尔多夫展览(上海)有限公司 (Messe Düsseldorf (Shanghai) Co., Ltd) 及雅世展览服务有限公司 (Adsale Exhibition Services Ltd) 与世界包装行业之间的合作。这两

家公司作为联合主办方, 将继续主办interpack China。

“这远不仅是一个新名字, interpack China也标志着我们和全球包装行业生态的更紧密连接, 也是我们把国际视角带给中国企业的重要目标。”杜塞尔多夫展览(上海)有限公司总经理Evian Gu如是说到。她表示: “在未来, 我们将更紧密的与来自世界各地的合作方展开合作, 共同挖掘智能生产和创新材料的潜力, 为未来的包装行业培育新人才。”

中国在加工和包装行业有着举足轻重的地位。中国不仅是核心参与者, 并在很多方面与全球包装行业深度交融。作为“世界工厂”, 中国有强大的工业制造能力并催生出一套强大的, 完备的包装产业。

高密度的工业生产创造了对包装材料 and 包装设备的巨大需求。从硬纸板包装, 薄膜包装到复杂的灌装和贴标解决方案, 包装行业与工业产品共同增长。与此同时, 中国正发展成为全球最大的消费市场之一。大批中产阶级的诞生与电商领域的飞速发展催生出现在安全性, 可再生性及智能包装解决方案方向的巨大需求。

第一届interpack China将于2026年11月16日至18日举办。

swop is now interpack China – A New Chapter for a Strong Brand

Shanghai World of Packaging (swop) has been part of the interpack alliance for ten years – a fact it now proclaims in its name. With its presence as interpack China, Messe Düsseldorf is strengthening its international brand family and sending a clear message on the importance of the Chinese packaging market.

To mark its anniversary, swop has repositioned itself strategically and will be continuing its success story as interpack China. The new brand identity was unveiled at the opening ceremony of this year's event. As interpack China, the trade fair is gaining ever more international importance – fuelled by the trust and innovative strength that interpack stands for worldwide.

"The interpack alliance is synonymous with quality, reliability and strong partnerships across the globe. interpack China highlights this connection and instantly adds recognition value," says Thomas Dohse, Director of interpack and interpack alliance.

"As part of a global brand, interpack China brings together international and Chinese companies, granting exhibitors direct access to one of the most exciting and rapidly-growing packaging markets in the world."

The new name also strengthens the close co-operation maintained by Messe Düsseldorf (Shanghai) Co., Ltd. and Adsale Exhibition Services Ltd. with the global packaging industry. As joint organisers, the two companies will continue to host interpack China.

"This is more than just a new name. interpack China represents our even closer connection to the global packaging ecosystem and our aim to bring international perspectives to the Chinese market," says Evian Gu, General Manager of Messe Düsseldorf Shanghai. "In future, we will be working even more intensively with partners from all over the world to develop potential in the areas of intelligent production and innovative materials together and to foster talent for the future of the packaging industry."

China's importance for the processing and packaging industry is tremendous. The country is not only a key player; in many ways it is also intertwined with the global packaging industry. As the "workbench of the world", China has enormous industrial manufacturing power and therefore a strong, integrated packaging industry.

Its high production density creates extensive demand for packaging materials and machines. From cardboard packaging and films to complex filling and labelling solutions, the packaging sector is growing in step with industrial production. At the same time, China is developing into one of the largest consumer markets in the world. A growing middle class and the boom in e-commerce are continuing to drive demand for safe, sustainable and intelligent packaging solutions.

The first interpack China will take place from **16-18 November 2026**.

► Messe Düsseldorf GmbH
www.interpack.com/en/interpack_alliance/interpack_China

泰国子公司成立

细川阿尔派 (Hosokawa Alpine), 作为粉末和颗粒加工和吹塑薄膜挤塑 (blown film extrusion) 领域的顶尖供应商之一, 继续扩张其全球销售网络并通过新成立细川阿尔派亚太公司 (Hosokawa Alpine Asia Pacific) 加强其在泰国本地的布局。

这家位于曼谷附近的公司于2025年10月1日开始运营并聚焦于吹塑薄膜挤塑业务领域的销售和服务。“通过最新成立的销售办事处, 我们将着重加强我们在亚洲地区的销售增长,” 细川阿尔派吹塑薄膜挤塑部门的高级副总裁 Martin Schorbach 表示。

“得益于销售和服务能力的持续加强, 我们全球的客户都能受益于迅捷专业的咨询服务, 这些服务涵盖了整个细川阿尔派吹塑薄膜挤塑的所有业务” Schorbach 强调。

细川阿尔派亚太公司的董事经理 Christian Kisting, 对于这一新的业务

领域充满期盼, 并助力于新公司的建设。Kisting 表示: “我们向我们的客户承诺最顶尖的服务和在薄膜领域最高水准的, 一流的产品组合。”

Subsidiary in Thailand Established

Hosokawa Alpine, one of the leading suppliers in the field of powder and particle processing and blown film extrusion, is further expanding its global sales network and strengthening its local presence in Thailand with the newly founded Hosokawa Alpine Asia Pacific.

The company based near Bangkok commenced operations on 1 October 2025 and will focus on sales and service in the blown film extrusion business area. “With the newly established sales office, we are specifically strengthening our sales growth in the Asia

region,” says Martin Schorbach, Senior Vice President Blown Film Extrusion at Hosokawa Alpine AG.

“Thanks to the continuous expansion of sales and service capacities, our customers worldwide benefit from fast and competent advice that covers the entire range of services offered by Hosokawa Alpine's blown film extrusion division,” emphasises Schorbach.

Christian Kisting, Managing Director of Hosokawa Alpine Asia Pacific, is looking forward to this new field of activity and helping to build up the newly founded location. “We guarantee our customers comprehensive services at the highest level as well as a first-class product portfolio in the film sector,” says Kisting.

► Hosokawa Alpine AG
Hosokawa Alpine Asia Pacific
www.hosokawa-alpine.com

收购

布鲁克纳集团 (Brückner Group) 通过收购亨内基集团 (Hennecke GROUP) 持续推进其增长战略, 此举将扩充布鲁克纳集团的全球业务组合, 使其涵盖了用于聚氨酯 (PUR) 的关键机器, 设备及系统的核心技术。这些技术是对现有服务和产品的完美补充并将是进入新市场的契机。作为反应型塑料领域全球市场领头羊的亨内基集团, 给布鲁克纳集团带来了更多基于材料的高科技解决方案。该技术适用于建筑, 家具和制冷等行业, 并且创造了新的多元化发展潜力。

布鲁克纳集团和瑞士 Capvis AG 基金 (亨内基集团最大的控股方) 于 2025 年 12 月 3 日签署了收购协议。

亨内基集团在德国、意大利、美国和中国拥有国际化业务网络, 其行业领先



亨内基集团首席执行官 Thomas Wildt : “此次合并不仅是技术专长的整合和全球化市场布局, 也将为提升聚氨酯 (PUR) 国际市场地位奠定基础。这一举措是我们亨内基集团商业体系和‘聚焦2030增长战略’ (FOCUS2030 strategy) 的自然延伸。与布鲁克纳集团合作, 我们能在将来更快的把握创新力和增长潜力。”

Thomas Wildt, CEO of the Hennecke Group: “The merger will not only result in bundled technological expertise and a global market presence, but also allow us to form the basis for expanding our position in the international PUR market. This step represents a natural progression of our Hennecke Business System and the FOCUS2030 strategy for sustainable growth. Working with the Brückner Group, we'll be able to capitalize on innovation and growth potential much faster in the future.”

布鲁克纳集团首席执行官 Alex von Wiedersperg 博士 : “收购亨内基给我们的业务组合带来了高度专业化的补充。收购另一家技术领域的市场领导者合理化的增强了布鲁克纳集团的产品范围并为亨内基集团带来了强大的创新能力和全球影响力。”

Dr. Axel von Wiedersperg, CEO of the Brückner Group: “With Hennecke, we've gained a highly specialized addition to our portfolio. Acquiring another market leader in technology enhances the Brückner Group's product range in a sensible way and provides Hennecke with access to innovation power and a global presence.”



的业务组合拥有全球创新系统和技术, 带来卓越的经济和环境收益, 并在塑料行业-尤其是包装行业之外享有盛誉。这最终将使布鲁克纳集团步入新的产品领域并巩固其全球专业性基石。

Acquisition

The Brückner Group continues to pursue its growth strategy with the acquisition of the Hennecke GROUP, which will expand the company's global portfolio to include key technologies for machines, plants, and systems used in the processing of polyurethane (PUR). These technologies are the perfect complement to the existing range of services and products and will provide access to new

markets. As a global market leader with expertise in the field of reactive plastics, Hennecke brings additional material-based, high-tech solutions to the Group. This technology is suitable for use in many industries like construction, furniture, and refrigeration and creates new diversification potential.

The agreement between the Brückner Group and a fund advised by Capvis AG, Switzerland, as the majority owner of the Hennecke GROUP, was concluded on December 3, 2025.

Hennecke has an international network of sites in Germany, Italy, the US, and China, an industry-leading product portfolio of global, innovative systems and technologies with extraordinary economic and environmental benefits, and an excellent reputation in the plastics industry – especially outside of the packaging sector. This will ultimately allow the Brückner Group to tap into new product segments and reinforce its global base of expertise.

► Brückner Group SE
www.brueckner.com

新拓展

全球热塑性工程塑料领导者宝理塑料集团 (Polyplastics Group), 通过推出全新的 LH 和 TF 系列材料扩充其 LAPEROS® 品牌旗下液晶聚合物 (LCP) 产品线, 来满足电子产品市场对于高性能化和微型化的需求。

这些新的液晶聚合物系列材料通过量

大核心方式加速扩展应用场景和迭代产品: 一是灵活多样化满足设计需求, 二是高流动性。

LH 系列通过高流动性, 机械性能和耐热性具备非常均衡的性能表现。材料的适应性满足多元化的产品设计需求, 适配于多种电子元件的应用。

TF 系列则列专为极致流动性设计, 更好的成型智能手机和精密电子元件的复杂

几何结构。在时极具流动性的同时, TF 系列也保持着优秀的机械性能和灵活的模型窗口, 支撑了电子产品的微型性需求和高密度集成化需求。

宝理塑料利用人工智能的材料信息科方法和数据分析加速了材料开发的流程。通过分析多年积累的海量材料数据, 公司可精炼出材料的最有性能, 实现缩短开发流程和降低精度设计。

原产于日本和中国台湾地区的 LAPEROS® 液晶聚合物坐拥 20,000 吨产量和 34% 的全球市场份额（根据 Fuji Keizai 2025 报道）。高性能材料长期以来为电子元件领域的进步发展做重要支撑。

LAPEROS® 液晶聚合物具有卓越的机械强度，耐热性和线膨胀系数表现，广泛运用于下一代高速传输场景，比如智能手机和平板设备的超薄微间距连接器。

Expansion

Polyplastics Group, a global leader in engineering thermoplastics, has expanded its LAPEROS® liquid crystal polymer (LCP) product line with the launch of the new LH and TF series materials which meet the electronics market's growing demand for higher performance and miniaturization.

These new LCP series grades will accelerate expansion into a broader range of applications and next-generation product development through

two distinct approaches: versatility in meeting diverse design needs and high flowability.

The LH series has very well-balanced performance, combining flowability, mechanical properties, and heat resistance. The materials' adaptability allows them to accommodate a broad range of product designs, making them suitable for various electronic component applications.

The TF series is engineered for exceptional fluidity for better molding of complex geometries found in smartphones and precision electronic components. While maximizing flowability, the TF series also maintains excellent mechanical properties and a flexible molding window, providing materials that support miniaturization and high-density integration in electronic devices.

Polyplastics is leveraging Materials Informatics methods that utilize AI and data analysis to streamline mate-

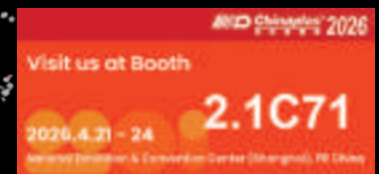
rials development. By analyzing extensive material data accumulated over many years, the company derives optimal properties, enabling shorter development cycles and highly precise designs.

Produced in the Japan and Taiwan region, LAPEROS® LCP has an annual production capacity of 20,000 tons and holds a 34% share of the global market (according to Fuji Keizai 2025 report). The high-performance material has long supported advancements in the electronic components sector.

LAPEROS® LCP's exceptional properties, including mechanical strength, heat resistance, and coefficient of linear thermal expansion, are driving its adoption in next-generation, high-speed transmission uses, such as ultra-thin, fine-pitch connectors for smartphones and tablet devices.

► Polyplastics Co., Ltd.
www.polyplastics.com

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执行董事会变动

2026年1月1日，细川阿尔派公司 (Hosokawa Alpine) 将迎来公司管理层的重大变动。现任执行董事成员-首席执行官 (CEO) Antonio Fernández博士和首席财务执行官 (CFO) /首席运营执行官 (COO) Jürgen Wilde-将卸任。将由 Michael Kuhnen接任首席执行官，Kathrin Dörle接任首席财务执行官。

Antonio Fernández博士和Jürgen Wilde多年以来对细川阿尔派公司的发展起到了至关重要的作用。他们的搭档任期是公司发展，稳定与创新的重要阶段。凭借战略视野，企业担当和人性化的领导方式，他们把细川阿尔派公司发展成一家国际知名企业。

Michael Kuhnen和Kathrin Dörle是一对年轻且经验丰富的新搭档，他们将接管负责细川阿尔派公司的未来发展。二位都与公司有着深厚的渊源：Michael Kuhnen在细川阿尔派公司不同的管理位子担任了19年，此次是在离开集团一年半后回归。

Kathrin Dörle已经是公司长达20年的老成员-她的任命标志着公司第一位加入执行董事会的女性成员。

在未来，Michael Kuhnen将驱动细川阿尔派公司的战略，并将负责公司的销售，运营区域以及国际子公司业务。Kathrin Dörle将接手财务部门和企业中心部门。



细川阿尔派公司前任和现任执行董事成员 (从左到右依次是) : Jürgen Wilde, Antonio Fernández博士, Michael Kuhnen和 Kathrin Dörle-这象征意义的接任标志着2026年初领导层的新篇章。

The previous and the new executive board of Hosokawa Alpine AG (from left to right): Jürgen Wilde, Dr Antonio Fernández, Michael Kuhnen, and Kathrin Dörle

ed Hosokawa Alpine into an internationally recognised company.

With Michael Kuhnen and Kathrin Dörle, a young yet experienced duo is taking over responsibility for the further development of Hosokawa Alpine. Both have close ties to the company: Michael Kuhnen has spent 19 years in various management positions at Hosokawa Alpine and is returning after one and a half years outside the Group.

Kathrin Dörle has been part of the company for over 20 years – her ap-

pointment marks the first time a woman has joined the executive board.

In future, Michael Kuhnen will drive the strategic development of Hosokawa Alpine and will be responsible for the sales and operational areas as well as the international subsidiaries.

Kathrin Dörle will initially take over the Finance and Corporate Centre divisions.

► Hosokawa Alpine Aktiengesellschaft
www.hosokawa-alpine.com

Executive Board Change

On 1 January 2026, Hosokawa Alpine underwent a significant change in the company's management. The current executive board – CEO Dr Antonio Fernández and CFO/COO Jürgen Wilde – stepped down from their positions. He was succeeded by Michael Kuhnen as the new Chief Executive Officer (CEO) and Kathrin Dörle as the new Chief Financial Officer (CFO).

Dr Antonio Fernández and Jürgen Wilde have been instrumental in shaping Hosokawa Alpine for many years. Their time in office together stands for a phase of growth, stability, and innovation. With strategic vision, entrepreneurial responsibility, and human leadership, they have develop-

介绍无蜘蛛管模用于挤出

全球挤出模具领导者Guill Tool最近宣布推出无蜘蛛管模具。这一新产品采用精密模具，相比传统篮模用于管道挤压，实现了更高的材料节约。

未来几年，灌溉/污水系统及工业应用管道的全球市场预计将增长。管道需求的增加主要由水务和污水基础设施的需求增加，以及工业化和城市化的增长推动。这些因素预计将推动中国、印度和巴西等新兴经济体以及美国和欧洲等发达市场对管道的需求。

这种新型管模通常能够提供最大外径4英寸的成品挤压，并可根据需求设计更大直径的模具。它有4140钢或不锈钢



两种，并经过热处理处理。该公司的无蜘蛛管模具设计区别于篮子模具，专注于精密模具，这些模具源自数十年在多层挤出、医用管材、流动分析以及Guill的ISO 9001和AS9100 (航空航天) 质

量体系的经验。考虑到产品启动简便和精确同心度带来的材料节省，Guill无蜘蛛管模具的重要性显而易见。

Guill's Spiderless Pipe Die现已上市，以满足客户在考虑各种因素以保持管道生产竞争力的需求。该产品完全由罗德

岛西沃里克的吉尔工厂构思、设计、工程和制造完成。

欲了解更多信息，请访问：
<https://www.guill.com/series/900-series/>

Spiderless Pipe Die for Extrusion Introduced

Guill Tool, the global leader in extrusion tooling, recently announced the availability of its Spiderless Pipe Die. This new offering utilizes precision tooling to provide increased material savings compared to conventional basket dies for pipe extrusions.

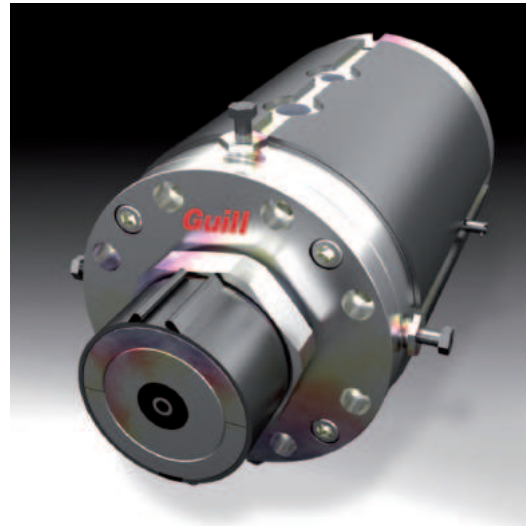
In the coming years, the global market for pipes used in irrigation/sewage systems and industrial applications is expected to grow. This increased demand for pipes is driven by the increasing need for water and wastewater infrastructure, as well as the growth of industrialization and urbanization. These factors are expected to drive demand for pipes in emerging economies such as China, India and Brazil, as well as in developed markets including the U.S. and Europe.

This new pipe die is typically capable of providing a finished extrusion

with an OD of up to 4", with larger diameter tooling engineered upon request. It's offered in 4140 steel or stainless with heat treating.

The company's Spiderless Pipe Die design differentiates itself from a basket die with its focus on precision tooling gained from decades of experience in multi-layer extrusions, medical tubing, flow analysis and Guill's ISO 9001 and AS9100 (Aerospace) quality systems. The significance of the Guill Spiderless Pipe Die becomes evident when considering material savings seen through ease of startup and precise concentricity of the product.

Guill's Spiderless Pipe Die is now available to meet the needs of its customers as they consider all the factors needed to remain competitive in pipe production. This product was entirely



无蜘蛛管子模具

Guill Spiderless Pipe Die

conceived, designed, engineered and manufactured at the Guill factory in West Warwick, Rhode Island.

For additional information:
<https://www.guill.com/series/900-series/>

► Guill Tool & Engineering, Co., Inc.
Jacob Marcure, Senior Design Engineer
高级设计工程师
jmarcure@guill.com
Peter Leary, Technical Sales Engineer,
Extrusion Division
挤出部技术销售工程师
pleary@guill.com



新建特种硅烷技术中心，瓦克拓展中国硅酮业务

为了加强特种业务，德国瓦克化学股份公司 (Wacker Chemie AG) 和中国特种硅烷生产商、合资伙伴山东硅科新材料有限公司 (SICO Performance Material) 在中国济宁联合创办了一个新的有机硅应用研发中心。该中心大约2300平方米并设置多个实验室，未来这里将成为适用于塑料，涂料及粘合剂行业添加剂的研发地。除此之外，此中心将承担研发，技术支持与生产间桥梁的职能。例如，SICO的生产中心及规模化资源同样坐落在济宁，这样可以充分助力研发工作。技术中心则因此可以加速新品问世。瓦克化学应用研发中心 (ADC) 的总投资达数十万欧元。

“作为创新硅酮特种产品及解决方案的供应商，我们将借助此研发中心在中国业务发展树立新的里程碑。我们聚焦高附加值特种硅烷，这些产品在中国的

需求在持续增加。此次与SICO的共同投资，加强了我们在该地区发展的决心与承诺。”瓦克硅烷业务部 (WACKER's Silicones business division) 总裁Tom Koini如是说到。

Wacker和SICO在有机硅领域有数十年的经验。它们用于例如生产高性能粘合剂的附着力促进剂，密封剂，涂料，复合材料的粘合剂或增强塑料的添加剂。由于特种硅烷能提高产品的机械性能和化学性能，近些年对于这类杂化聚合物的需求在持续上升。“济宁应用开发中心的启用，加强了我们在中国作为特种供应商的定位。”Koini说到，“在与SICO的合作中，我们能在研发和市场产品创新上给我们的客户更好的支持。”

在开业典礼上，山东硅科新材料有限公司总经理Kevin Qu表示，这些新的实验室是对未来的投资，也是Wacker和

SICO新区域合作的重要基石。他说：“我们可以将硅烷行业的经验共同汇入这座新的应用研发中心。”

这些专知识涵盖了从化工产品特性，供应链管理，工艺技术到当前市场趋势。我们将借助这些专业知识为我们的消费者开发更具前瞻性的创新产品。这也标志着双方合作的历史新篇章。”

这座2300平方米的应用研发中心坐落于济宁，距离SICO的生产部门不远。中心聚焦于研发添加剂，附着力促进剂，基于有机官能硅烷和功能性硅油的稳定剂。这些特种硅烷可用于定制高质量粘合剂和密封剂，涂料和塑料制品，这些广泛应用于高科技应用场景，比如新能源汽车，电子，电力，通信及涂料领域。中心的专家除了拥有深厚的应用经验，还具备丰富的生产及工艺知识。

Silicone Business in China Strengthened with New Technology Center for Specialty Silanes

To strengthen its specialties business, German chemical company WACKER and Chinese specialty silane producer and joint-venture partner SICO Performance Material have opened a new application development center for organofunctional si-

lanes in Jining, China. The approx. 2,300-squaremeter facility features several laboratories where high-performance additives for the plastics, coatings and adhesives industries will be developed going forward. In addition, the technology center acts as an

interface between research, technical support and production. For example, SICO's production and scale-up resources, which are likewise located in Jining, can be fully leveraged for development work. The technology center thus enables the rapid market launch of new products. Investments in the WACKER SICO Application Development Center (ADC) facility total a mid-six-figure euro sum.

瓦克有机硅事业部能源与工业业务单元 (Energy & Industrial Business Unit at WACKER's Silicones division) 负责人Laurent Morineaux与山东硅科新材料有限公司总经理Kevin Qu (左数第四，五位) 在中国济宁出席了WACKER SICO应用研发中心的开业典礼。(来源：WACKER)

Laurent Morineaux, head of the Energy & Industrial Business Unit at WACKER's Silicones division, and Kevin Qu, SICO Performance Material's General Manager (fourth and fifth from left) were among those who attended the opening of the WACKER SICO Application Development Center in Jining, China (Source: WACKER)

“As a provider of innovative silicone specialties and solutions, we can use this development center to achieve a key milestone for our business in China. Our focus is on high-margin specialty silanes, for which demand in China is rising continuously. This investment together with our partner SICO strengthens our presence and commitment to the region”, says Tom Koini, President of WACKER's Silicones business division.

WACKER and SICO Performance Materials have decades of experience in organofunctional silanes. They are used, for example, as adhesion promoters for the production of high-performance adhesives, sealants and coatings, as binders for composite materials or as additives to enhance



plastics. Because specialty silanes improve the mechanical and chemical properties of products, demand for such hybrid polymers has been rising for many years. "The opening of our Application Development Center in Jining enables us to strengthen our position as a specialties manufacturer in China," said Koini. "In partnership with SICO, we can now support customers even better in the development and marketing of innovative products."

At an opening ceremony, Kevin Qu, General Manager of SICO Performance Material, praised the new laboratories as an investment in the future and the cornerstone of a new

era of cooperation between WACKER and SICO. "We can now pool all of our silane expertise here at our application development center.

This know-how ranges from chemical product properties and supply chain matters through to questions of process engineering and current marketing trends. We will leverage this in-depth knowledge to develop forward-looking innovations for our customers. This marks a new chapter of success in the history of our joint venture."

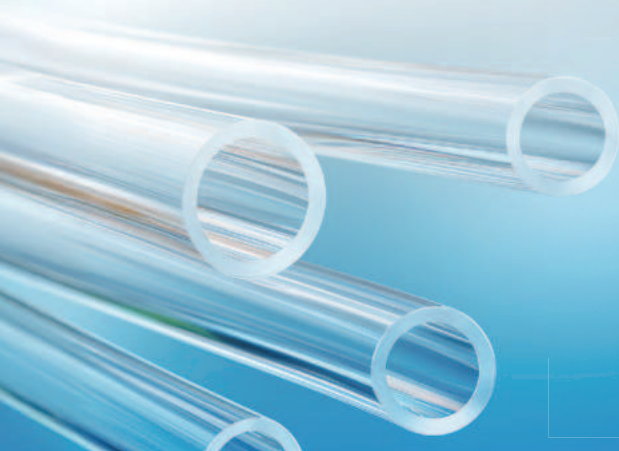
The 2,300-square-meter application development center is located in Jining, not far from SICO Performance Material's own production site. The center's

focus is on the development of additives, adhesion promoters and stabilizers based on organofunctional silanes and functional silicone fluids. Such specialty silanes make it possible to formulate high-quality adhesives and sealants, coatings and plastic products, which in turn are used in a large number of high-tech sectors, such as electromobility, electronics, power engineering, telecommunications, and coatings. In addition to broad applications expertise, the center's experts have extensive knowledge relating to production and process engineering as well.

► Wacker Chemie AG, www.wacker.com

Zumbach

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1

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作为全球挤出模具的领军者，Guill Tool 现推出 Unicam™ 十字头。该产品源于公司两项久经经验的核心技术的升级：Single-Point™ 同心度调节系统和 Cam-Lock 无紧固件装配系统。

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在模头后端，由于配备全新升级的 Cam-Lock 系统，用扳手旋转一圈即可拆卸模头，实现快速便捷的换色或清洁。不必费力使用锤子和撬杠拆卸部件进行清洁。由于配备 Cam-Lock 系统，旋转拆卸扳手不仅能松开分流器，继续

组装后的 Unicam™ 十字头

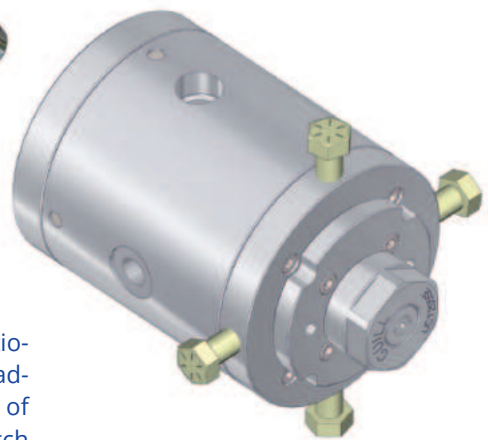
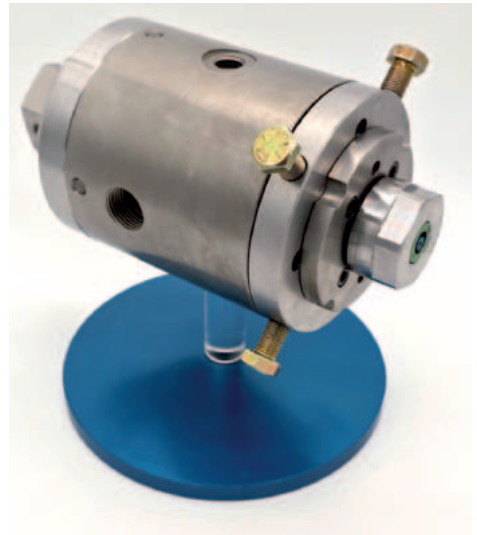
Assembled Unicam™ crosshead

旋转还能顺势将其完全顶出。用户通常只需要将扳手旋转半圈，就能在十分钟内完成清洁或换色并恢复生产。



Unicam™ 渲染图

Rendering of Unicam™



Unicam™ Crosshead Introduced

Guill Tool, the global leader in extrusion tooling, now offers the Unicam™ crosshead. The name derives from a combination of advancements made to two of the company's most tried and true technologies: the Single-Point™ concentricity adjustment system and the Cam-Lock fastener-free assembly system.

On the front of the head, the new Universal Adjustment system allows

the user to choose either the traditional 4-bolt method of concentricity adjustment or the Single-Point™ style of concentricity adjustment. To switch from traditional to Single-Point™ operation, simply remove the four locking bolts that hold the adjustment ring in place. If an application requires very fine adjustments, optional Micro-Adjust screws are available.

On the back of the head, the newly

improved Cam-Lock system allows for the head to be disassembled with a single turn of a wrench for very quick and easy color changes or cleanouts. There is no need to struggle with hammers and pry-bars to disassemble components for cleaning. Thanks to the Cam-Lock system, turning the disassembly wrench not only loosens the splitter, but continuing to turn the wrench will mechanically extract the splitter. With just one half-turn of a wrench, users will typically be able to clean or change colors and start the line again in less than ten minutes.

拆解后的 Unicam™

Disassembled Unicam™



► Guill Tool & Engineering, Co., Inc.
Jacob Marcure, Senior Design Engineer
高级设计工程师
jmarcure@guill.com
Peter Leary, Technical Sales Engineer,
Extrusion Division
挤出部技术销售工程师
pleary@guill.com

业务拓展-第16套定制模具投产

总部位于格拉斯哥的Nexus Packaging公司自2024年工厂开业以来，已正式投产其第16套定制模具。此举进一步兑现了其致力于灵活、高性能包装解决方案的承诺。另有八套模具正在开发中，并将很快投入生产。持续的开发投入反映了工业和化工应用领域对定制瓶设计日益增长的需求。

Nexus Packaging所有的电动吹塑机都配置了多种挤出头间距和模具配置方案，使得公司能满足广泛的模具定制需求。这些配置能使公司高效应对上市新品和不断变化的规格需求。

首先支持这种定制能力的是四腔材料混合器（four-chamber material blenders），混合器能精确混合原生聚合物、回收料、定制色母粒以及消费后回收材料（post-consumer recycled, PCR）。这确保了产品色差小、性能稳定并可在需要时添加回收材料。

一旦定制瓶的生产参数得到优化，所有核心加工数据-包括型坯曲线图（parison graphs）、挤出机温度、吹塑压力和



循环时间--这些都将以数字形式存储于设备的内存中。这种数据驱动的方法最大限度的减少了模具更换造成的停机时间，确保不同生产批次品质的稳定性。

Nexus Packaging提供一体化开发服务，通常能在16周内将项目从概念设计、建模、模具制造推进到全面生产阶

段。“我们致力于将技术的精度与生产效率相结合。通过灵活地配置设备并储存优化后的生产数据，使我们能快速、稳定的完成定制包装解决方案，同时能减少停机时间。”Nexus Packaging制造总监Charles Wagner表示。

Expansion – Custom Mould Capability with 16th Tool Commissioned

Glasgow based Nexus Packaging has commissioned its 16th custom mould since opening its manufacturing facility in 2024, reinforcing the company's commitment to delivering flexible, high-performance packaging solutions. A further eight bespoke tools are currently in development and will soon enter production. The continued investment reflects growing demand for tailored bottle designs across a range of industrial and chemical applications.

Nexus Packaging's all-electric blow moulding machines have been configured with multiple extrusion head spacings and mould mounting arrangements, enabling the business to accommodate a broad spectrum of custom mould requirements. This configuration allows the company to respond efficiently to new product

launches and evolving customer specifications.

Supporting this capability are advanced four-chamber material blenders, which allow the precise mixing of virgin polymer, regrind, custom pigments and post-consumer recycled (PCR) material. This ensures consistent colour accuracy, technical performance and the integration of recycled content where required.

Once manufacturing parameters for a custom bottle have been optimised, all key processing data – including parison graphs, extruder temperatures, blowing pressures and cycle timings – are digitally stored within the machine's memory. This data-driven approach minimises mould changeover downtime and ensures repeatable quality across production runs.

Nexus Packaging offers a fully integrated development service, taking projects from concept and design through modelling, tooling and into full production, typically within 16 weeks.

“Our focus is on combining technical precision with production efficiency,” said Charles Wagner, Manufacturing Director at Nexus Packaging. “By configuring our equipment for flexibility and storing optimised production data, we can deliver bespoke packaging solutions with speed, consistency and reduced downtime.”

► Nexus Data Systems Ltd
Nexus Packaging
enquiries@nexpack.co.uk

www.extrusion-global.com

专为刮刀清洁而设计的新型过滤器

FIMIC公司是塑料回收领域自动化熔体过滤器的全球标杆企业，现宣布推出其最新创新成果：FCS过滤器。这是一套突破性解决方案，旨在解决回收商在过滤过程中面临的最常见痛点：污染物卡在刮刀通道内部难以清除的问题。

在塑料回收领域，新的回收物料（过去常被焚烧处理）进入了回收环节中。新物料意味着杂质种类更多，数量更多，例如聚对苯二甲酸乙二醇酯（PET）纤维、尼龙（PA）纤维、铝箔、金属粉末、沙子或杂质微粒。这些污染物常常会卡在熔体过滤器的刮刀通道内，导致停机时间增加，并需要更频繁的更换滤网（通常每2-3天一次）来清洁刮刀组件。为解决这个痛点，业内需要一种能够确保刮刀得到彻底清洁、并同时能有效排出已过滤污染物的技术。

FIMIC的解决方案是FCS强制清洁刮刀（Forced Cleaning Scraper）。这是过滤器的一种新型设计，其配备了一个机械活塞，可对刮刀通道进行快速、有效且强制性的清洁。与传统解决方案不同，得益于这种机械作用，刮刀的清洁不再依赖于进入压力，从而保证清洁工作在任何工作情况下稳定进行。

FCS过滤器的核心优势

- 彻底清洁刮刀通道，延长设备的工作时间
- 进入压力不再是有效清洁的关键因素
- 高效排污，即使对污染严重的回收材料也能有效排污
- 针对解决难处理污染物，如塑料纤维，铝箔，砂粒，金属粉末和小石子

FCS过滤器设计用于与RAS过滤器相同的过滤精度、处理量和适用于相同回收材料，没有特别的限制。但是它还特别适用于纤维、铝箔或细小微粒含量高的物料，因为在这种情况下，常规的RAS刮刀难以排出杂质。

FCS过滤器有四种型号以供选择：FCS400、FCS500、FCS600和FCS700，旨在满足不同回收工厂的需求。通过FCS系列产品，FIMIC为不同生产规模的厂



家提供了可靠的解决方案，实现彻底的刮刀清洁和有效排污。

凭借FCS过滤器，FIMIC公司希望超越传统解决方案，为服务商提供一种能最终克服刮刀清洁不彻底的方法。这套创新方法保证了更长的设备运行时间和更高的工艺可靠性，即便是面对最具挑战的污染物。

New Filter Designed for Complete Scraper Cleaning

FIMIC, a global reference in automatic melt filters for plastic recycling, announces the launch of its latest innovation: FCS Filter, a breakthrough solution designed to solve one of the most common issues recyclers face in filtration – contaminants stuck inside scrapers.

In plastic recycling, new materials streams (previously being incinerated) now end up in the recycling world. New materials mean new and more contaminations, such as PET/PA fibers, aluminum foils, metal powders, sand, or fine particles that often get trapped inside the scraper channels of melt filters, causing increased downtimes and requiring frequent screen changes (typically every 2 to 3 days) to clean the scraping elements. To overcome this issue, what the industry truly needed was a technology capable of ensuring complete and reliable scraper cleaning together with an effective discharge of the filtered contaminants.

FIMIC's answer is the FCS - Forced Cleaning Scraper, a new filter design equipped with a mechanical piston that

performs a fast, effective, and forced cleaning of the scraper channels. Unlike traditional solutions, thanks to this mechanical action, the scraper cleaning is independent from inlet pressure, guaranteeing consistent performance under all working conditions.

Key benefits of FCS Filter:

- Complete cleaning of scraper channels, extending machine working time
- Inlet pressure no longer crucial for effective cleaning
- Efficient discharge of contaminants even in highly contaminated streams
- Specific solution for difficult contaminants such as plastic fibers, aluminum foil, fine sand, metal powders and small stones

The FCS Filter is designed for the same filtrations, throughputs, and materials as RAS filters, with no particular limitations, but is especially suited for streams with high

levels of fibers, aluminum, or fine particulate where standard RAS scrapers struggle to discharge properly.

The FCS filter is available in four different sizes – FCS 400, FCS 500, FCS 600, and FCS 700 – designed to meet the needs of different recycling plants. With this range, FIMIC provides a reliable solution for complete scraper cleaning and effective contaminant discharge across various production scales.

With the FCS Filter, FIMIC wants to go beyond conventional solutions and offer recyclers a way to finally overcome the issue of incomplete scraper cleaning. This innovation guarantees longer machine uptime and greater process reliability, even with the most challenging contaminants.

► FIMIC Srl.
www.fimic.it

电容器及包装薄膜性能提升



采用ViviOn 8210XT材料的刚性确保了金属化包装薄膜的阻隔效果

The rigidity of substrates with ViviOn 8210XT ensures the barrier effect of metallized packaging films
(© asbe/istockphoto.com (m.), © 200mm/istockphoto.com (r.))

ViviOn是台湾聚合化学股份有限公司 (USI Corporation)推出的新型环状嵌段共聚物 (CBC)，它是一种完全氢化物。该系列产品现已加入德国分销商Dreyplas的产品列表中。除了高纯度外，所有等级的ViviOn都具备低密度、高透明度、低吸水率和低可萃取物含量的特点。根据其微观结构的不同，其机械性能范围可从柔到刚。ViviOn可用作多层薄膜中的独立层，或作为聚乙烯 (PE) 或聚丙烯 (PP) 的掺混材料。其广泛的应用领域涵盖从先进的薄膜电容器 (film capacitors)，到食品和医疗器械的包装，再到生物诊断 (biodiagnostic)、紫外线 (UVC) 消毒、光学仪器及集成电路 (IC) 制造。

薄膜电容器的更高应用温度: 新型的ViviOn 0645具有147°C的玻璃化转变温度、低介电常数和低介电损耗等特性，这些特性专为满足高性能聚丙烯薄膜电容器日益增长的耐热需求而设计。这些电容采用创新的半导体材料，使电力电子、可再生能源和新能源交通等领域的电子设备能效更高且体积更小。由于这些半导体材料需要更多能量来传导电

子，它们比传统的硅基材料更适合在更高的温度、电压和电频下工作。与传统的双向拉伸聚丙烯 (BOPP) 电容器薄膜相比--这类薄膜难以满足这些要求--ViviOn 0645将相应电容器的耐热性和尺寸稳定性提升到了所需水平。

增强金属化薄膜的阻隔效果: 得益于其优秀的阻隔性能，真空金属化流延薄膜 (vacuum-metallized cast films) 常用于多层包装中。然而纯聚乙烯或聚丙烯材料刚性和强度较低，在承受应力时可能导致其表面超薄金属层开裂。这使得氧气和水分能渗入包装，缩短内容物

的保质期。混入ViviOn 8210XT 可提高刚性的同时不影响柔韧性，从而降低开裂风险。根据应用需求，这也使更薄、更省料的包装成为可能。此外，这种环状嵌段共聚物可用于优化薄膜的抗撕裂延展性，这更方便消费者撕开包装。ViviOn 8210XT 附有 cyclos-HTP研究所颁发的“包装材料可回收”证书，并获准应用于食品和制药行业。

ViviOn™ 是台湾聚合化学股份有限公司的品牌

Improving Properties of Capacitor and Packaging Films

ViviOn is the name of a new family of cyclic block copolymers (CBC), a fully hydrogenated polymer from USI Corporation, which now complements the product portfolio of the German

distributor Dreyplas. In addition to high purity, all grades provide low density, high transparency, low water absorption, and a low amount of extractables. Depending on the micro-

structure, the mechanical properties range from rigid to soft. ViviOn can be used as a separate layer in multilayer films or as a blend partner with PE or PP. The wide range of applications extends from advanced film capacitors to packaging for food and medical devices to biodiagnostics, UVC disinfection, optics, and IC manufacturing.

Higher application temperatures for film capacitors: With a glass transition temperature of 147 °C, low dielectric constant, and low dielectric loss, the new ViviOn 0645 is tailored to the increased thermal requirements of high-performance polypropylene (PP) film capacitors. These use innovative semiconductor materials that enable more efficient and smaller electronic devices in areas such as power electronics, renewable energies, and e-mobility. Since they require more energy to conduct electrons, they operate at higher temperatures, voltages, and frequencies than traditional silicon. Compared to conventional capacitor films made of biaxially oriented polypropylene (BOPP), which have difficulty meeting these requirements,

ViviOn 0645 increases the heat resistance and dimensional stability of corresponding capacitors to the required values.

Enhanced barrier effect with metallized films: Thanks to their excellent barrier properties, vacuum-metallized cast films are often used in multilayer packaging. However, the comparatively low stiffness and strength of substrates made of pure PE or PP can cause cracks to form in the ultra-thin metal layer applied to them when subjected to stress. This allows oxygen and moisture to penetrate the packaging, reducing the shelf life of the contents. Blends with ViviOn 8210XT offer higher stiffness without compromising flexibility, thus reducing the risk of cracking. Depending on the application, this may also allow for the use of more material-efficient films with lower thicknesses. In addition, this CBC can be used to optimize the tear propagation resistance of the film, which is an important convenience feature for easy opening applications. ViviOn 8210XT comes with a "Recyclability of Packaging Material"



采用ViviOn0645的 电容器薄膜比传统的聚丙烯薄膜更耐热 (左图)

Capacitor films with ViviOn 0645 withstand higher temperatures than conventional PP films (left) (© Kuzmik_A/istockphoto)

certificate issued by cyclos-HTP Institute and is approved for use in food and pharmaceutical applications.

ViviOn™ ist a trademark of USI Corporation

► DREYPLAS GmbH
www.dreyplas.com

标准化回收设备在市场中大获成功

ReadyMac在2022年德国杜塞尔多夫国际塑料及橡胶博览会 (K SHOW, K展) 首次亮相。三年之后, 这款标准化、现货供应的回收设备以全新面貌及新增的消费后回收材料处理配置, 重新在2025年K展上与消费者见面并共同庆祝其在市场上取得的成功。其销售数据持续增长, 截止2026年3月的本财年, 其装机量已与上财年装机量总和持平。

ReadyMac将高品质的回收技术与极具吸引力的固定价格和短的时效性相结合。客户由此获得一款标准化设备的所有优势, 该设备可广泛应用于多种薄膜和回收料 (Regrind) 的处理。配备EREMA激光过滤器的重型版特别适合消费后回收材料, 其固定价格为44万欧元。第二款搭载了SW RTF®换网系统, 是一款灵活度高的全能机型, 用于

处理中度污染的回收材料, 投资成本为37.5万欧元。两种配置均配备高性能的多用途挤出机螺杆, 处理量可达500公斤/小时。

自推出以来, ReadyMac在市场上的分量持续增强。特别是在2024年年底产品升级以及2025年年初推出ReadyMac 500 HD之后, 需求量显著增加。在2025/2026当前财年中, 新投产的机器数量已达两位数。除了欧洲客户, 来自南非和拉丁美洲地区的客户也选择信赖ReadyMac。

“市场反馈说明, ReadyMac是一款成功的产品。”EREMA公司ReadyMac业务部门负责人 Michael Köhnhofer表示, “我们的客户赞赏其便捷的使用性, 具有吸引力的价格和值得信赖的EREMA品质。在当下每一笔投资都需

要慎重考虑的时期, 这对很多公司都极具吸引力。”

EREMA集团首席执行官 Manfred Hackl认为, ReadyMac是一个极佳的战略补充。“通过ReadyMac, 我们的目标是吸引那些希望凭借一台能快速使用的可靠设备, 进入塑料回收领域, 而非寻求定制化方案的客户。因此, 我们再次强化了EREMA集团的产品组合。”

这款标准化设备的成功得益于EREMA采用TVE挤出技术的成熟挤出系统以及专利预处理调节单元 (PCU)。最终, EREMA让更广泛的客户群体能更容易的获得可靠的回收技术。除了诱人的固定价格和短期交付外, 客户还能享受EREMA久经考验的售后服务体系带来的优势, 包括快速的备件供应和全球支持。

Standardised Recycling Machine is Well Established on the Market

The K 2022 show saw the launch of the ReadyMac. Three years later, with a new look and an additional configuration for post consumer materials, the standardised recycling machine made to stock celebrates its success on the market at K 2025. The sales figures have continued to grow. So far, in the current financial year, which ends in March 2026, as many machines have already been installed as in the whole of the previous year.

The ReadyMac teams up high quality recycling technology with an attractive fixed price and immediate availability. Customers gain the advantage of a standardised machine that can be used universally for multiple film and regrind applications. The heavy duty version with EREMA laser filter is especially suitable for processing post consumer waste streams and is available at a fixed price of EUR 440,000. The second version, equipped with an SW RTF® screen changer system, is a flexible all-rounder for processing medium contaminated feed material for an investment of EUR 375,000. Both configurations are equipped with an efficient multipurpose extruder screw and achieve throughputs of 500 kilograms per hour.

Since its launch, the ReadyMac has continuously gained in market presence. Demand has increased in particular following the relaunch at the end of 2024 and the introduction of the ReadyMac 500 HD in early 2025. During the current financial year 2025/26, the number of new machines commissioned has already reached double digits. Besides customers in Europe, companies in regions such as South Africa and Latin America have also chosen to rely on ReadyMac.

"The feedback from the markets shows us that we are onto a winner with the ReadyMac", says Michael Köhnhofer, Head of Business Unit



EREMA公司ReadyMac 业务部负责人Michael Köhnhofer对产品的成功感到欣喜。现货供应的回收机提供两个版本：配备激光过滤器或配备SW RTF®换网器系统。
(图片来源：EREMA)

Michael Köhnhofer, Head of Business Unit ReadyMac at EREMA, is delighted with ReadyMac's success. Made to stock, these recycling machines are available in two versions: with a laser filter or with an SW RTF® screen changer system
(Photo Credits: EREMA GmbH)

ReadyMac at EREMA. "Our customers appreciate the combination of quick and easy availability at an attractive price, and proven EREMA quality. This is something that appeals to many companies at a time when each investment needs to be evaluated very carefully."

Manfred Hackl, CEO at the EREMA Group, sees the ReadyMac as an optimum strategic addition: "With the ReadyMac we are aiming to reach customers who are looking to enter plastics recycling with a reliable machine that is available quickly, rather than a custom-built solution. As a result, we have yet again strengthened the portfolio of the EREMA group of companies."

The success of the standardised machine is based on the proven extrusion system from EREMA featuring TVE technology and the patented Pre-conditioning Unit (PCU). Ultimately, EREMA has made reliable recycling technology more accessible to a wider circle of companies. On top of the attractive fixed price and short delivery times, customers gain the advantage of the proven EREMA after sales service package with rapid spare parts supplies and worldwide support.

► EREMA Engineering Recycling Maschinen und Anlagen GmbH
www.erema.com

www.extrusion-global.com

成功的三重奏

来自芬兰的循环经济先驱企业Syklo Oy正依靠德国Leistritz Extrusionstechnik公司的专业技术来扩展其回收业务。这家总部位于德国纽伦堡的复合材料专家正在提供三条级联挤出生产线，这些生产线显著提高了从消费后回收料中回收高密度聚乙烯（HDPE）、聚丙烯（PP）、低密度聚乙烯（LDPE）的效率，可将芬兰的塑料回收能力提升50%。在与技术合作伙伴NGR（Next Generation Recyclingmaschinen）的紧密合作下，正在打造最先进的系统，为能源效率和材料质量树立新标杆。在位于芬兰许温凯（Hyvinkää）的新循环经济中心，这三条挤出回收生产线将处理来自家庭和商业的混合消费后回收塑料。

每条生产线的核心是配备MAXX技术的Leistritz ZSE双螺杆挤出机。结合NGR的C-GRAN切割-压实-挤出方案，回收材料首先被压缩和均质化处理，然后用Leistritz的双螺杆挤出机进行掺混与精炼。

“欧盟《包装及包装废料法规》（PPWR）将于2026年8月生效，对塑料包装的要求将显著提高--从强制使用回收材料，到生产者责任延伸制度（EPR），再到更严苛的材料规格。对我们而言，这意味着回收必须变得更高效、更精确、更具持续性。同时，回收产品必须满足更高的质量要求。”Syklo公司首席执行官Teemu Koskela解释道。

“得益于Leistritz的创新双螺杆技术和数十年的专业能力，我们才能够从容的面对这些挑战。携手合作伙伴Leistritz，我们已为即将到来的包装法规做好了充分准备，并能向客户提供高质量、颜色分类、且可持续的再生材料。”Teemu Koskela补充道：“我们新循环经济中心的另一大亮点在于完全闭环的水处理系统：废水将被蒸馏并在回收过程中重复利用。含有塑料微粒的污泥将被干燥处理，防止任何塑料微粒重新进入循环水中。”

高质量、高效、精准、可持续：在回收的第一阶段，材料经过优化处理，为后续在Leistritz双螺杆挤出机中的进一步回收步骤做准备。第二阶段是至关重要的掺混阶段，通过精确计算的添加剂计量，可生产出高质量的回收材料，用于要求严格的塑料制品--例如聚烯烃（PO）薄膜。得益于高效的脱挥处理，挥发性杂质被有效去除，这对于高纯度要求的应用至关重要。



三家专业公司-同一目标：卓越的回收材料质量：Roberto Freire Matteucci, Daniel Nagl (Leistritz), Teemu Koskela (Syklo Oy), Josef Hochreiter, Stefan Lehner (NGR)（图片来源：Pictures ©Leistritz）

Three expert companies – one goal: superior recyclate quality: Roberto Freire Matteucci, Daniel Nagl (Leistritz), Teemu Koskela (Syklo Oy), Josef Hochreiter, Stefan Lehner (NGR) (Pictures ©Leistritz)

专业能力推动循环经济：该项目为可持续发展的未来打造成功案例：具有高机械稳定性的高质量回收材料能够被生产，按需定制满足可回收塑料行业的需求。回收和掺混的结合展示了即使原料

质量不稳定，也能制造出优质的可回收材料。并可以满足对纯度和机械稳定性的需求，例如用于聚烯烃薄膜或高质量注塑成型部件。

Successful Triple

Finnish circular-economy pioneer Syklo Oy is relying on the expertise of Leistritz Extrusionstechnik to expand its recycling capacities. The Nuremberg-based compounding specialist is supplying three cascade extrusion lines that significantly increase the efficiency of recycling HDPE, PP and LDPE from post-consumer waste streams and can boost Finland's plastics recycling capacity by up to 50%. In close collaboration with technology partner NGR – Next Generation Recyclingmaschinen, state-of-the-art systems are being created that set new standards in energy efficiency and material quality. At the new Circular Economy Hub in Hyvinkää, the three recycling extrusion lines process mixed post-consumer plastics from household and commercial waste.

At the heart of each line is the Leistritz ZSE twin-screw extruder with MAXX technology. In combination with NGR's C-GRAN cutter-compacter-extruder solution, the material is first compressed and homogenized before being compounded and refined using Leistritz's twin-screw technology.

„With the EU Packaging and Packaging Waste Regulation (PPWR) coming into force in August 2026, the requirements for plastic packaging are rising significantly – from mandatory recycled content to extended producer responsibility and stricter material specifications. For us, this means that recycling must become more efficient, more precise and even more sustainable. At the same time, recycled products must meet substantially higher quality demands,” explains Teemu Koskela, CEO of Syklo.

„Thanks to Leistritz's innovative twin-screw technology and decades of

expertise, we can now reliably meet these challenges. With Leistritz as our partner, we are fully prepared for the upcoming regulatory requirements and can offer our customers high-quality, color sorted and sustainable recyclates,” says Teemu Koskela. He adds: „Another unique feature of our new Circular Economy Hub is the fully closed water loop on site: the wastewater will be distilled and reused in the recycling process. The separated sludge containing microplastics will be dried, preventing the release of any microplastics into water bodies.”

High-quality, efficient, precise, sustainable: In the first stage of the recycling process, the material is optimally prepared for the subsequent upcycling step in the Leistritz twin-screw extruder. This second compounding stage is crucial, as targeted additive dosing produces high-quality recyclates that can be used in demanding plastic products – such as PO films. Thanks to high-performance

即使在原料质量不稳定的情况下，也能实现最佳的熔体质量、工艺可靠性和高质量的可回收材料。

Optimum melt quality, process reliability and high-quality recyclates even with fluctuating feedstock: Leistritz Inline Elongational Rheometer



devolatilization, volatile impurities are effectively removed, which is essential for applications with high purity requirements.

Expertise driving the circular economy: The project exemplifies successful strategies for a sustainable future: high-quality recyclates with stable mechanical properties can be produced – tailored to the needs of a circular plastics industry.

The combination of recycling and

compounding demonstrates how premium recyclates can be created even from highly variable feedstock qualities. As a result, stringent requirements for purity and mechanical stability can be met, for example for PO films or high-quality injection-molded components.

- ▶ Syklo Group www.syklo.com
- ▶ Leistritz Extrusionstechnik GmbH <https://extruders.leistritz.com/>

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EXTRUSION

EXPERT MEDIA ON PLASTICS EXTRUSION

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挤压技术新发展

Extrusion Takes Some New Turns



Guill Tool 公司位于美国罗德岛州西沃里克市，多年来一直是医用管材和其他产品挤压模具领域的全球领导者，并在多层共挤模具领域取得了诸多成就。

A longtime global leader in extrusion tooling for medical tubing and other products, Guill Tool has achieved a series of successes in the areas of multi-layer dies and, most recently, a reciprocal tubing die for wound draining that reconfigures the internal chambers of the tubing to accommodate drainage.

最近，该公司又推出了一款往复式伤口引流管模具，此款模具可以重新配置管材的内腔，以适应引流的需要。引流管可用于预防性插入，以防止或清除伤口积液，也可用于治疗性插入，以排出伤口内现有积液。排出积液是为了治疗或预防感染，促进伤口愈合，并提升病人舒适度。引流管还可用于诊断术后并发症，如吻合口瘘或出血。Guill 的模具设计具有独特的功能，无需以焊接等方式连接不同型材的截面。

“我们的自动挤压工艺可在生产中显著改变挤压型材，无需连接内部型材的不同截面。”— Tom Baldock, Guill Tool 销售经理。

Guill 设计的这款新型往复式管材模具具有多种独特功能。传统的头端和模具组件由线性往复式组件代替，该组件在给定长度内改变管材的外形。此过程在挤出全程不间断地重复进行。切割能力外加挤出速度将成品切割成一定的长度。

可降低成本和减少价值流活动，同时提升质量。一次挤压即可产出成品，无需多次挤压、更换模具，以及通过声波焊接等连接方法手工组装不同形状的管材。Guill 的新型往复式挤

压头完全消除了装配操作。它还消除了在制品库存。因此，无需储存装配、订单履单和成品补给所需的各种形状的管材和接头。

此外，往复式挤压头消除了连接件，允许准时生产和按订单生产产品。最后，它还缩短了从接收订单到发货的总运行时间。

在 Guill Tool 多年来优先关注的多层共挤领域，该公司还推出了最新款 Series 800，这是一款 2 至 6 层挤出模具，旨在生产面向医疗和外科应用的 1/8" 至 6" 外径管材，具有最出色的质量和材料效率。经过重新设计的 Series 800 可实现含氟聚合物和其他材料的无缝平滑挤出和分层，适用于所有多层、多腔医用管材。Guill 的设计进一步允许聚合物和粘合剂的薄层（0.02 毫米以下）组合。

Guill 提供各种十字头和内联管路模具，具有固定或可调节中心，适用于单挤压或共挤压应用。该模具旨在用于加工所有化合物，具有公司享有专利的精密 Feather Touch 同心度调节器，即 Seal Right 系统，该系统与 Feather Touch 系统相结

合，消除了聚合物泄漏。Guill 还提供独特的螺旋流量分配系统。

所有 Guill 模具的生产都利用计算流体力学 (CFD) 程序进行了严格的流道计算机模拟，从而优化均匀流动，而且没有接合线。

最后，Guill Tool 全新推出的 Series 900 内联管路模具实行标准定价，并提供更好的挤出性能和定制能力。

这个新系列适用于直径从 0.005 英寸 (0.127 毫米) 到 8.0 英寸 (635 毫米) 的软管或管材挤出，以及各类聚合物或橡胶 OEM、食品服务、汽车、工业、电信和医疗应用。

Series 900 技术具有以下主要优点：

- 实现同心度或 "产品圆度"，与其他类型的挤出模具相比，可显著降低材料用量
- 无十字线内联设计挤压头不会产生十字线，从而允许更多空气进入，无需可能限制产品产量的冷却支架
- 可同时运行 1-5 层
- 专为多种应用而设计，包括特殊的含氟聚合物应用

Guill Tool Series 900 的一个主要技术亮点是正在申请专利的 FeatherTouch™ 模座调节装置，以及无需松开固定螺钉即可进行调节的筒式滚珠组件。Series 900 的其他独特优势还包括 Guill 的 Seal Right Systems，该系统带来良好的密封性，可消除导流板之间的泄漏，而且易于自动对准，可减少装配过程中的操作错误，并适应各种特定的挤出机布局配置。

"这个系列提供面向挤压头的标准平台设计，以及针对具体应用的独特功能，且不会增加模具成本。因而，企业能以标准价格获得可定制的精密工具，这是一项卓越优势。这无疑可帮助我们的客户提升利润。"Guill 销售经理 Tom Baldock 表示。

Guill Tool 还使用最先进的计算机数控机床和 EDM 设备制造喷嘴、模具和断流板。此外，该公司还提供工程服务，使

用最新的 CAD 系统来定制设计挤压模具产品，如十字头、喷嘴、夹具、法兰、成型辊、无十字网内联模具、模具、摆门、断流板、专用设备和定径模具。

Guill Tool 于 1995 年获得 ISO 认证。作为首家达到国际标准的大型挤出模具公司，Guill Tool 长期以来一直被公认为是定制挤出模具的领先设计商和制造商之一，其产品应用领域包括电线、电缆、光纤、医用管材、木质复合材料、汽车管、塑料复合、定制应用、橡胶、型材、工业管材、软管/管材、吹塑以及食品和包装等。

Guill Tool 还鼓励并为挤出行业提供教育和培训，包括塑料和铝制模型挤压头、图文并茂的分步组装和拆卸操作手册、培训视频以及挤出模具的维护和清洁课程。

Guill Tool 成立于 1962 年，由 A. Roger Guillemette 在罗德岛创立，最初是为新英格兰地区的电线、电缆或电线电缆、塑料和橡胶行业提供喷嘴、模具、十字头和替换部件的加工厂。后来，Guill Tool 逐步成为整个美国和加拿大的供应商，并迈入全球市场。

医疗领域的技术不断发展，通常需要各种材料和厚度的医疗级管材。Guill 专注于与客户合作设计和制造定制挤压工具，以生产业内最高质量的医用管材。该公司的 Micro Medical 模具可挤出比头发丝更细的管材，每转 0.008 英寸或更细，从而尽可能实现微创手术。其他型号可用于生产喂食管用管，包括鼻胃管和空肠管。

Drain tubes can be inserted prophylactically to prevent or remove the accumulation of fluid in a wound. Alternatively, such tubing can also be therapeutically inserted to evacuate an existing collection of fluid in a wound. Fluid is removed in order to treat or prevent infection and promote wound healing and patient comfort. Drain tubes can also be used to diagnose post-operative complications such as an anastomotic

各种伤口引流管和手术管设计的内部配置无需再分别挤出和截面连接。Guill 的往复式挤压头设计可连续生产管材内的各种型材

Internal configurations of different designs used on wound drain and surgical tubing no longer require separate sections to be extruded, then joined. The Guill reciprocating head design produces various profiles within the tubing in a constant production run



leak or hemorrhage. The Guill design has unique features that eliminate the need to weld or otherwise join sections with different profiles together.

“Our automated extrusion process drastically changes the extruded profile in production, with no need to join separate sections of internal profiles,” comments Tom Baldock, Sales Manager, Guill Tool

Guill has engineered this new reciprocal tubing die with various features, unique to the product. The traditional tip and die assembly is replaced with a linear reciprocating assembly that changes the tube’s profile within a given length. This process is repeated throughout a single extrusion run without interruption. Cutting capability, in association with the extrusion speed, cuts the finished product to length.

While cost and value stream activities are reduced, quality is actually improved. Only one extrusion run is needed to produce a finished product, as opposed to multiple extrusion runs with tooling changes along with a manual assembly operation to connect different tubing shapes via sonic welds or other methods of joining. Guill’s new reciprocating head eliminates this entire assembly operation. It also eliminates in-process inventory. Thus, there is no need for storage of various tubing shapes and connectors needed for assembly, fulfillment of orders and replenishment of finished goods.

Furthermore, the reciprocating head eliminates a connecting piece, allows JIT production and products made-to-order. Lastly, it reduces total run time from receiving the order to shipping product.

In the multi-layer extrusion arena, a primary focus of Guill Tool over the years, the company has also introduced the latest generation of its Series 800, the 2-to-6 layer extrusion tooling designed to produce the highest quality, highest material-efficient 1/8” to 6” OD tubing for medical and surgical applications. The redesigned Series 800 produces flawlessly smooth extrusion and layer definition of Fluoropolymer and other materials for all

multi-layer, multi-lumen medical tubing. The Guill design further allows thin layer combinations of polymers and adhesives to 0.02mm or less.

Guill offers its extensive line of crossheads and inline tubing dies in fixed and adjustable center, for single or co-extrusion applications. The tooling is designed to process all compounds and features the company’s patented, precision Feather Touch Concentricity adjustment, the Seal Right System, which combines with the Feather Touch system to eliminate polymer leaking. Guill also offers its unique spiral flow distribution system.

All Guill tooling is produced with rigorous computer simulation of the flow channels using Computational Fluid Dynamics (CFD) programs, resulting in optimum uniform flow with no weld lines.

Finally, the new Series 900 of inline tubing dies from Guill Tool offers improved extrusion performance and capabilities to customize at standard, off-the-shelf prices.

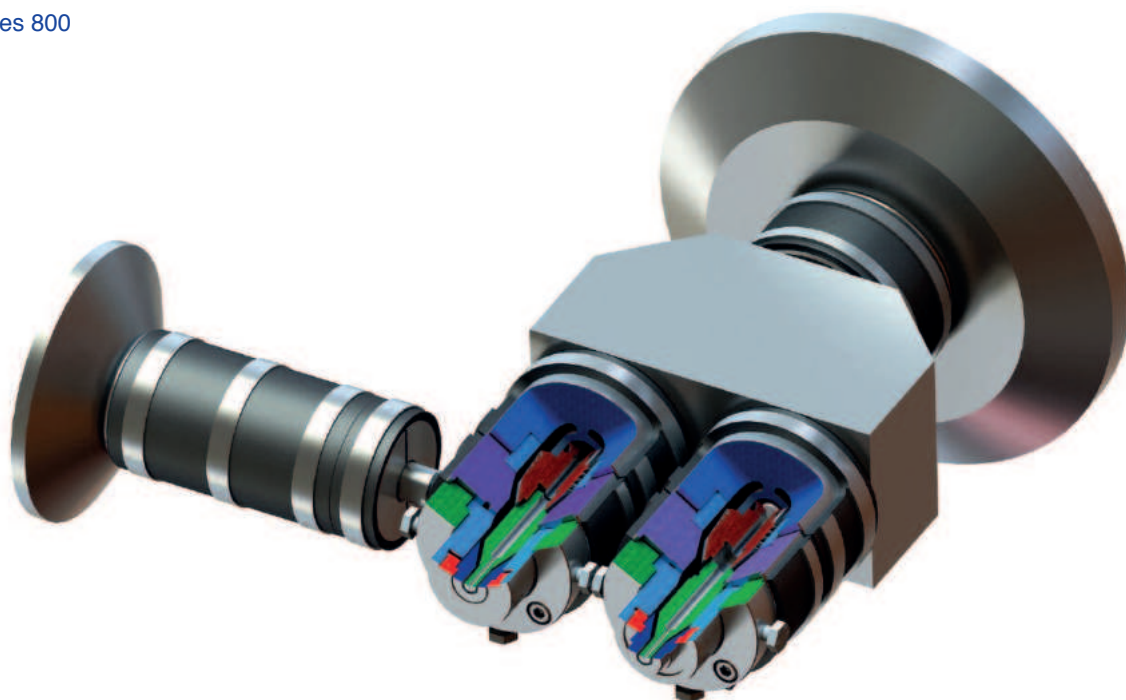
The new series is applicable to extrusion of hose or pipe ranging from 0.005” (0.127mm) to 8.0” (635mm) in diameter for all types of OEM, food service, automotive, industrial, telecom and medical applications in polymer or rubber.

The Series 900 technology offers these key benefits:

- Achieves concentricity or “product roundness” which greatly reduces material usage compared with other types of extrusion tooling
- Spiderless inline-designed heads results in no spider lines and allows room for more air – thus eliminating cold legs, which can inhibit product output
- Runs 1 to 5 layers simultaneously
- Engineered for a multitude of applications – including special fluoropolymer applications

A key Guill Tool technical highlight of the Series 900 is a patent-pending FeatherTouch™ adjustment in the die holder and a

Guill Series 800



Guill Series 900



cartridge-style ball assembly that does not require the loosening of retaining screws to make adjustments. Additional unique benefits of the Series 900 include Guill's Seal Right Systems, a positive seal, which eliminates leakage between deflectors, along with easy self-alignment that reduces operator error during assembly and is adaptable to a variety of specific extruder layout configurations.

"This series offers a standard platform design of the head with specific characteristics that are unique to individual applications included at no additional charge in the cost of the tooling. This is a tremendous benefit to a company that requires precision tooling with custom benefits at a standard off-the-shelf price. That certainly helps our customers' bottom line," says Tom Baldock, Guill Sales Manager.

Guill Tool also manufactures tips, dies, and breaker plates using state-of-the-art computerized CNC machining and EDM equipment. As well, engineering services using the latest CAD systems are available for custom-designing extrusion tooling product such as crossheads, tips, clamps, flanges, forming rolls, spiderless inline dies, dies, swing gates, breaker plates, special equipment and sizing dies.

Guill Tool received ISO certification in 1995. The first major extrusion tooling company to meet international standards, Guill Tool has long been recognized as one of the leading established designers and manufacturers of custom extrusion tooling for applications including wire, cable, fiber optics, medical tubing, wood composites, automotive tube, plastic compounding, custom applications, rubber, profile, industrial pipe, hose/tube, blow molding, plus food and packaging.

Guill Tool also encourages and provides education and training for the extrusion industry with plastic and aluminum model heads, fully illustrated operating manuals for step-by-step assembly and disassembly, training videos, and classes on the care and cleaning of extrusion tooling.

Founded in Rhode Island in 1962 by A. Roger Guillemette, Guill Tool was established as a job shop supplying tips, dies, crossheads and replacement parts to the wire, cable or wire and cable, plastic and rubber industries in New England. Later, Guill Tool became a supplier for the entire United States and Canada, and today enjoys a worldwide market presence.

Technology in the Medical field is constantly evolving, and often requires an extensive array of Medical grade tubing in a variety of materials and thicknesses. Guill specializes in working with clients to design and manufacture Custom Extrusion Tooling to produce an unparalleled range of the highest quality Medical tubing in the industry. The company's Micro Medical tooling can extrude tube thinner than a human hair, 0.008" or finer per revolution, and can be used to keep procedures as non-invasive as possible. Other models are used to produce tubing for feeding applications, including nasogastric and jejunal tubes.

► Guill Tool & Engineering Co., Inc.
10 Pike Street, West Warwick, RI 02893, USA
sales@guill.com
www.Guill.com

SmartLine - 新式全电动挤出型吸塑机系列

The New Fully Electric Extrusion Blow Moulding Machine Series

贝克姆 (Bekum) 公司借助全新的全电动SmartLine系列扩张了其设备产品组合, 该系统其专为降本增效而设计。通过从零到一的研发, 使客户能以更具性价比的方式进入挤出型吹塑技术领域, 同时在能耗和生命周期成本方面提供了卓越的表现。

With the new fully electric Smart-Line, Bekum expands its machine portfolio with a series consistently engineered for efficiency and cost-effectiveness. Developed entirely from scratch, the new machine range enables a cost-efficient entry into extrusion blow moulding technology – while delivering convincing performance in energy consumption and life-cycle costs.

SmartLine可降低30%的设备投资成本, 并兼顾了Bekum久经考验的工艺和质量专长。全新的采购和制造理念是这些投资优势的基础。与此同时, 优选的驱动技术结合高效率的HiPEX挤出机可将能耗成本降低高达20%。精确的过程控制和高效的材料利用率能额外使材料节省高达10%。

“我们在K2025展会上推出的全电动SmartLine系列全球首发是一个战略里程碑。我们非常了解我们的客户, 特别是消费包装领域的客户, 他们必须精打细算。凭借全新的SmartLine系列, 我们成功降低了30%的设备投资成本。”管理合伙人Michael Mehnert强调。

面向消费包域客户的紧凑型解决方案

SmartLine系列是专为消费包装领域的中小型制造商和刚进入吸塑技术领域的企业而研发。Bekum推出了该系列的前两种型号: SBLOW 5S/D和SBLOW 15S/D, 这两种型号的吹塑机可选紧凑型的单工位(S)或双工位(D), 其锁模力分别为50千牛(KN)和150千牛。开模行程分别为380毫米(mm)和560毫米。最大模具宽度分别为370毫米和560毫米, 最大模具高度分别为350毫米和500毫米。这使得设备在保持较小占地面积的同时, 满足要求严格的包装应用场景需求。



SBLOW 5S型单工位挤出型吹塑机, 锁模力为50千牛, 也可选择双工位机型。(图片来源: Bekum)

Model SBLOW 5S single-station blow moulding machine with 50 kN clamping force, also available as a double-station machine (Images sources: Bekum)

节能的高性能挤出

SmartLine同样搭载了久经考验的高性能HiPEX挤出机和Bekum的专利挤出头。该系统保障了高工艺稳定性, 最大的产出率和出色的熔体均匀性。中空制品圆周上的均匀壁厚保障了生产的可重复性和部件质量的稳定性。短流径和均匀的温度控制支撑了稳定且经济的生产。

配备旋转伺服电机的精密锁模单元

SmartLine的锁模单元由一个电动旋转伺服电机驱动。不同于持续旋转的普通电机, 该电机可精确移动到设定的角度并在所需位置上精准停留。这实现了紧凑的设备设计, 简化的控制架构, 高定位精度并且降低能耗。

Bekum Control 8.0- 直观显示且支持工业4.0

SmartLine配备了成熟的Bekum Control 8.0，一个功能强大且面向未来的设备控制系统。24英寸全高清触摸竖屏便于直观操作，并通过仪表盘使产量和能耗数据清晰呈现。集成的工业4.0功能可将系统无缝衔接到数字化生产环境中。

包含数字化服务

SmartLine完全集成于Bekum的数字化服务环境中。BEKUM旗下的Smartconnect提供实时远程支持服务。通过数字化备件目录能永久访问相关零部件的信息。与此同时覆盖全球的Bekum现场服务和零部件供应能力进一步完善了这一产品组合。

现代化兼具功能性的设备设计

SmartLine秉承了Bekum屡获殊荣的设计理念。该设备以其集现代化与功能性于一身的外观令人印象深刻，并兼具简便的可操作性和可视化区域。符合人体工学理念的设计使日常生产中的维护，换模及人员操作更加轻松便利。

Bekum通过SmartLine给那些想进入挤出型吹塑技术领域及想以优化成本的方式扩大产能的公司提供了一套经济，节能且技术领先的解决方案。

The SmartLine combines a 30% reduction in machine investment with Bekum's proven process and quality expertise. New sourcing and manufacturing concepts form the foundation for these investment advantages. At the same time, optimized drive technology in combination with energy-efficient HiPEX extruders reduces energy costs by up to 20%. Precise process control and efficient material utilization additionally enable material savings of up to 10%.

"A strategic milestone is the world premiere of our fully electric SmartLine series, which we presented for the first time at K 2025. We clearly understand that our customers, particularly in consumer packaging, must calculate sharply. With the new SmartLine, we were able to reduce machine investment costs by 30%," emphasizes Managing Partner Michael Mehnert.

Compact Solution for Consumer Packaging

The SmartLine is specifically designed for small and medium-sized producers in the consumer packaging segment as well as for newcomers to extrusion blow moulding technology. With the first two models – SBLOW 5S/D and SBLOW 15S/D – Bekum introduces a compact single-station (S) and double-station (D) blow moulding machine featuring 50 kN and 150 kN clamping force respectively, and opening strokes of 380 mm and 560 mm. Maximum mould width is 370 mm and 560 mm respectively, with mould heights of 350 mm and 500 mm. This makes the machine ideally suited for demanding packaging applications while

maintaining a small footprint.

Energy-Saving High-Performance Extrusion

The SmartLine also relies on proven high-performance HiPEX extruders and Bekum's proprietary extrusion heads. The system ensures high process stability, maximum output rates, and excellent melt homogeneity. Uniform wall thickness distribution across the entire circumference of the hollow body guarantees reproducible production results and consistent part quality. Short flow paths and homogeneous temperature control support stable and economical production.

Precise Clamping Unit with Rotary Servo Motor

The SmartLine clamping unit is driven by an electromechanical rotary servo motor. Unlike continuously rotating electric motors, the rotary motor moves precisely to a defined angle and stops exactly at the required position. This enables a compact machine design, simplified control architecture, and high positioning accuracy – combined with reduced energy consumption.

Bekum Control 8.0 – Intuitive and Industry 4.0 Ready

Equipped with the proven Bekum Control 8.0, the SmartLine features a powerful and futureproof machine control system. The 24" Full HD portrait touch display offers intuitive operation and clearly visualizes throughput and energy data via dashboard. Integrated Industry 4.0 functionality enables seamless integration into digital production environments.

Digital Services Included

The SmartLine is fully integrated into Bekum's digital service environment. Bekum SmartConnect provides real-time remote support. A digital spare parts catalog ensures permanent access to relevant component information. The service portfolio is complemented by worldwide Bekum Field Service and reliable spare parts availability.

Modern and Functional Machine Design

The SmartLine follows the award-winning Bekum machine design concept. The machine impresses with its modern and functional appearance as well as generous access and visibility areas. The ergonomic machine concept supports maintenance, mould change processes, and operator convenience in daily production.

With the SmartLine, Bekum offers an economical, energy-efficient, and technologically advanced solution for companies entering extrusion blow moulding technology or expanding production capacities in a cost-optimized manner.

► Bekum Maschinenfabriken GmbH
Kitzingstraße 15/19, 12277 Berlin, Germany
www.bekum.com

双螺杆挤出机-可发性聚苯乙烯生产新标准

Twin Screw Extruder Sets New Standards in Expandable Polystyrene Production



使用科倍隆ZSK双螺杆挤出机，可在单设备上高效生产聚苯乙烯微粒

With the Coperion ZSK twin screw extruder efficient production of EPS microbeads is possible on a single machine

NexKemia (NexKemia Petrochemicals Inc.) 公司是可发性聚苯乙烯 (EPS) 制造领域的领军企业，自2020年起一直信赖使用科倍隆 (Coperion) 旗下的ZSK双螺杆挤出机。NexKemia专注于创新制造工艺和持续为包装行业和建筑保温领域提供产品。除了白色聚苯乙烯 (EPS) 外，NexKemia还生产掺入石墨的聚苯乙烯，也称为石墨聚苯乙烯 (GPS)，以及含有高达30%回收料的产品。NexKemia使用科倍隆的ZSK双螺旋挤出机来生产及开发产品，该设备能够在同一生产线上实现白色和灰色EPS的环保生产及温和处理，并添加回收材料。

NexKemia Petrochemicals Inc., a leading firm in manufacturing expandable polystyrene (EPS), has relied on ZSK twin screw extruders from Coperion since 2020. Focusing on innovative manufacturing processes and sustainability, NexKemia provides products for the packaging industry and as well as for building insulation. Along with white EPS, NexKemia also produces EPS mixed with graphite, known as GPS (polystyrene mixed with graphite-enhanced polystyrene), as well as products containing up to 30% recyclate. For manufacturing and product development, NexKemia uses Coperion ZSK twin screw extruders, which enable an environmentally friendly production and gentle product handling of white and gray EPS as well as the integration of recycled materials on a single production line.

双螺杆技术简化生产工艺

传统上，白色可发性聚苯乙烯是通过悬浮聚合工艺间断生产的，即苯乙烯的聚合是分批次进行的。此外也存在持续性生产工艺，通过加入添加剂和戊烷并经过几个持续性工艺步骤进行处理。工艺会用到双螺杆挤出机，单螺杆挤出机或静态冷却混合机的不同组合。相比之下，科倍隆提供了生产聚苯乙烯的简便技术，使用ZSK双螺杆挤出机实现一步法工艺。

尤其在悬浮聚合工艺中，必须严格保持化学平衡，即使非

常小的杂质或异物都可能破坏化学平衡并影响工艺进程。因为在挤出机内不发生化学反应只是混合原料，所以因此这对该制造工艺不构成挑战。所有原料都由科倍隆高精度的K-Tron喂料器送入ZSK挤出机，并通过精确控制的剪切力和较短的停留时间加工成均匀的熔体。这样可以确保材料承受较低的热应力。微粒制造是在挤出机之后的水下造粒机里进行的，生成直径非常小 (≤ 1 毫米) 且粒径分布均匀的微粒。

创新聚苯乙烯产品的经济效益和可持续生产力

除了创新性的实现了一步法以外，ZSK挤出机还能生产石墨聚苯乙烯和含回收料的产品。在生产石墨聚苯乙烯时，会添加游离石墨（free graphite）及其它成分，由于石墨能反射热辐射，使得产品具有更高的隔热性能。NexKemia的石墨聚苯乙烯表现出极低的导热系数（lambda value），具备更优秀的隔热能力。

NexKemia与科倍隆合作，成功的将添加回收料集成到聚苯乙烯同一生产线中。经过提纯和压力处理过的回收料可直接送入ZSK挤出机。根据质量要求、微粒特性及可用回收料情况，可实现30%甚至更高的回收料比例。最终的产品性能优异，其物理性质与没添加回收料的“纯新”产品相当。除此之外，该工艺在废气排放量及废水排放量上也低于其它工艺。

“使用科倍隆双螺杆挤出机，我们能满足各种应用场景并制造特种产品。得益于出色的工艺技术支持，我们共同为聚苯乙烯生产带来创新且环保的新工艺。这也是我们坚守以客户为中心，保持创新和可持续发展的核心价值观。”NexKemia母公司Integreon总裁Michael Hays表示。

Twin screw technology simplifies production process: Conventionally, white expandable polystyrene (EPS) is manufactured discontinuously within the scope of suspension polymerization, whereby the monomer styrene is polymerized in a batch process. Alternatively, continuous manufacturing processes exist whereby processing occurs with the feeding of additives and pentane in several successive process steps. Various combinations of twin screw extruders, single screw extruders or static cooling mixers are used. Coperion, in contrast, offers a technology for manufacturing EPS in a very simple, single-step process, using the ZSK twin screw extruder.

Particularly in the case of suspension polymerization, the chemical balance during the reaction must be maintained, as even minimal impurities or foreign materials can disrupt the balance and destabilize the process. As no reaction takes place in the extruder, but rather the substances are mixed, this does not pose a challenge to this manufacturing process. All ingredients are fed into the Coperion ZSK extruder via high-accuracy Coperion K-Tron feeders and

processed into a homogeneous mass using precisely modified shear introduction and short residence time. This ensures a low thermal stress upon the material. Micropellet manufacturing takes place in an underwater pelletizer following the extruder, generating very small pellets (≤ 1 mm) with a very narrow particle size distribution.

Economical and sustainable manufacturing of innovative EPS products: Along with the novelty of single-step EPS manufacturing, the ZSK extruder also enables production of graphite-enhanced polystyrene (GPS) as well as products containing recycled material. When manufacturing GPS, free graphite, among other ingredients, is added to the product which reflects the heat radiation and thus offers higher heat insulation than white EPS. NexKemia's GPS products demonstrate a very low lambda value, representing a lower heat conductivity and thus very good insulating capacity.

NexKemia has succeeded, together with Coperion, in integrating recycled material into EPS manufacturing – on just one production line. The purified and compacted regrind can be fed directly into the ZSK extruder. Depending upon quality requirements, micropellets, and availability of the discharge material, recycling content of up to 30% or greater can be realized. The final EPS product is outstanding, with equal physical properties to those of new products. Moreover, the process is superior to others with markedly lower airborne emissions, as well as a significant reduction in wastewater production.

“Using Coperion twin screw extruders, we have the ability to manufacture specialized products for various applications. Thanks to the excellent collaboration and process-technical support, we were able to realize new and environmentally friendly processes together for EPS manufacturing. This allows us to be true to our values of customer focus, innovation and sustainability”, said Michael Hays, President of Integreon, parent company of NexKemia.

► Coperion GmbH
Theodorstraße 10, 70469 Stuttgart, Germany
www.coperion.com/



NexKemia公司专注于创新制造工艺和可持续生产，为包装行业和建筑保温行业提供产品：白色聚苯乙烯（EPS），混有石墨的聚苯乙烯（GPS）以及回收料含量高达30%的产品。（照片来源：NexKemia公司，加拿大魁北克省曼松维尔）

Focusing on innovative manufacturing processes and sustainability, NexKemia provides products for the packaging industry and as well as for building insulation: white EPS, EPS mixed with graphite, as well as products containing up to 30% recycle (Photos: NexKemia Petrochemicals Inc., Mansonville, Québec/Canada)

项目 - 创新工艺，利用农业废料和修剪残枝生产可持续生物塑料

Project – Innovate Processes to Manufacture Sustainable Bioplastics from Agricultural Waste and Pruning Residues



瓦伦西亚（Valencian）农业部门每年会产生约800,000吨植物废料，比如稻草和柑橘修剪残枝。目前回收这些生物废料的成本高昂，因为处理这些废料需要投用商业酶（commercial enzymes），这类成本可占整个回收工艺的40%，这限制了其工业可行性。为了解决这个难题，西班牙塑料技术中心AIMPLAS正在主导名为“BIOVALSA”的项目，该项目旨在发展通过这些农业废料和修剪残枝生产可持续生物塑料的创新工艺。该项目由IVACE+i Innovation资助，并通过ERDF Comunitat Valenciana项目在2021至2027年期间从欧盟获得财政支持。

Every year, the Valencian agricultural sector generates around 800,000 tons of plant waste, such as rice straw and citrus pruning waste. Currently, the methods for recovering this biomass are costly, as they require commercial enzymes that can represent up to 40% of the cost of the process, which limits its industrial viability. To solve this problem, AIMPLAS, the Plastics Technology Centre, is leading the “BIOVALSA” project, an initiative that seeks to develop innovative processes for manufacturing sustainable bioplastics from agricultural waste and pruning residues. The project is funded by IVACE+i Innovation and receives financial support from the European Union through the ERDF Comunitat Valenciana programme for the 2021-2027 period.

BIOVALSA将开发一种新的工艺，能利用农业废料制造生物塑料，成为石油基合成替代材料的可持续代品。该项目旨在研发从稻草中回收生物价值的可替代方式，从而避免高昂的酶制剂成本。具体而言，其思路是用其它处理方法取代常规方法（酶制剂），用来回收木质纤维素生物质（lignocellulosic biomass）中纤维素（cellulose），半纤维素（hemicellulose）和木质素（lignin）这三种成分，用于生物塑料工业中所感兴趣的各种应用。

纤维素可用来生产乳酸（lactic acid），乳酸是生产聚乳酸（PLA）的关键化合物，而聚乳酸又是应用最为广泛的生物塑料；半纤维素可用来生成琥珀酸（succinic acid），琥珀酸是生产另一种可持续生物聚合物聚丁二酸丁二醇酯（PBS）的必要材料，PBS具有较优的柔韧性和耐热性；木质素的抗菌特性使其被回收用作添加剂来防止微生物繁殖，这进一步提高了这些可降解可堆肥废料的的市场价值，并拓展了其潜在应用。

合作公司和研究中心

BIOVALSA项目由AIMPLAS塑料技术中心协调，分享其在废物回收和有机聚合物合成方面的宝贵经验，并联手瓦伦西亚理工大学（Polytechnic University of Valencia）食品工程学院（FoodUPV）的专家们和其它三家位于瓦伦西亚自治区的企业。Bioban公司将贡献其基因组分析能力，确定最适合处理废料的细菌菌株；Viromii公司将研究拓展用于生物复合材料新工艺的经济可行性；Prime Biopolymers公司作为终端客户，将负责生产生物材料，并分析项目期间产出材料的适用性。

该项目正在其发展的第一年，在采用不涉及有毒物质的替代方法分离稻草成分方面已取得进展。同时也正在测试能够分解纤维素和半纤维素并生成乳酸和琥珀酸的不同细菌和微生物菌株，用来生产生物塑料的必要材料。

BIOVALSA项目符合由IVACE+i Innovation推动的战略专业创新委员会（CEIE）关于循环经济技术赋能战略。在循环经济方面，它符合通过研发材料和技术，利用废料生产高附加值产品的战略。在技术赋能方面，它倡导应用生物技术来改善工艺和产品。该项目也契合瓦伦西亚自治区只能专业化战略（S3）的主旋律，该战略由该地区工业、旅游、创新和贸易部共同协调。



BIOVALSA will develop a new process that will enable the use of agricultural waste to manufacture bioplastics, a sustainable alternative to petroleum-based synthetics. This initiative aims to develop alternative routes for recovering value from rice straw biomass, thereby avoiding the use of costly chemical compounds. Specifically, the idea is to replace the usual treatments with others that allow the three fractions (cellulose, hemicellulose and lignin) that make up the lignocellulosic biomass to be recovered for use in various applications of interest to the bioplastics industry.

Cellulose will thus be used to produce lactic acid, a key compound in the manufacture of PLA, the most widely used bioplastic, while hemicellulose is expected to yield succinic acid, which is necessary for the production of PBS, another sustainable biopolymer with greater flexibility and heat resistance.

Finally, the antimicrobial properties of lignin make it suitable for recovery and use as an additive to prevent the proliferation of microorganisms, which increases the market value and expands the potential applications of these biodegradable and compostable materials.

Collaborating companies and centres

Coordinated by AIMPLAS, which contributes its experience in both waste recovery and biopolymer manufacturing, “BIOVALSA” also brings together specialists from the University Institute of Food Engineering at the Polytechnic University of Valencia (FoodUPV) and three other companies based in the Valencian Community. Bioban will contribute its genomic analysis capabilities to identify the most suitable bacterial strains for carrying out the treatments, while Viromii will study the economic viability of new processes for obtaining biocomposites. Finally, Prime Biopolymers, as the end customer, will be responsible for producing the biomaterials and analyzing applicability of the materials obtained during the project.

The project is in its first year of development, during which progress has been made in separating the components of rice straw using alternative methods that do not involve toxic substances. Different strains of bacteria and microorganisms capable of breaking down cellulose and hemicellulose to generate the lactic and succinic acids necessary for the production of bioplastics are also being tested.

BIOVALSA is aligned with the conclusions of the Strategic Specialised Innovation Committees (CEIE) on Circular Economy and Enabling Technologies, promoted by IVACE+i Innovación. In the first case, it responds to the development of materials and technologies for the production of high added-value products from waste and, in the second, it urges the application of biotechnology to improve processes and products. It also falls within the main axes of the Valencian Community's Smart Specialisation Strategy, S3, which is coordinated by the Regional Ministry of Industry, Tourism, Innovation and Trade.

► AIMPLAS
www.aimplas.es

高效生产力的智能解决方案

Smart Solutions for High Productivity



借助细川阿尔派的现代化解决方案，薄膜制造商能即时掌握设备状态和生产水平

With the modern software solutions from Hosokawa Alpine, film manufacturers can keep an eye on the operating status and productivity of their system at all times

德国机械工程公司商细川阿尔派（Hosokawa Alpine）推出了实用的系统自动化与数字化解决方案，助力客户更高效、安全且经济地运营吹膜生产线。数字化的启动助手支持快速无误的设备启动；现代化的监控解决方案确保生产过程的完全透明化；预测性维护工具则有助于避免非计划停机。这些解决方案为客户提高了生产计划的保障性，减少了停机时间，并提升生产的整体效能。

The German mechanical engineering company Hosokawa Alpine presents practical solutions for system automation and digitalisation that enable customers to operate their blown film lines more efficiently, safely and economically. A digital start-up assistant supports fast and error-free start-up, modern monitoring solutions ensure full transparency during operation and predictive maintenance tools help to avoid unplanned downtimes. This gives customers more planning security, reduces downtimes and increases the overall performance of their production.

辅助系统简化设备操作

细川阿尔派系统自动化的核心是ExVis过程可视化软件。其中包括一个启动助手，用来简化系统的启动过程。特定薄膜配方的设定参数存储在软件中。操作员无需具备工艺工程专业知识，即可通过四个自动化步骤启动设备。公司还提供了一种用于薄膜牵引的操作设备，该设备可连接至牵引装置或锁模系统（collapsing system）并进行操作。这使得操作员能即时控制所连接组件。

自动化解决方案提升效率与生产力

细川阿尔派还通过各种自动化解决方案帮助吹膜厂商优化其系统的使用，加速流程并显著提升生产力。这包括一个可自动化调节的冷却环（cooling ring insert）插件。最佳冷却空气参数设置可以被保存并自动重新启用。ExVis包含一键更换（one-touch change）功能，该功能可包含预设的规格切换和锁模系统和侧褶（side gussets）的复现设置。这最大限度地减少了切换产品（或规格）所需要的时间及相关的材料损耗，并为吹膜制造商提供了高度的灵活性。

监控系统保障顺畅生产

为了尽可能维持设备的高生产力，细川阿尔派提供了一套监控系统，能够即时可视化生产过程中的故障，并支持快速排除故障。一套安装在牵引装置，卷线机和MDO上的摄像系统可生成图像，操作员可通过终端调取查看。这使得即使在设备不可见区域，也能从控制面板获得系统概览。在紧急情况下，细川阿尔派旗下服务品牌Blueserv可以快速接入系统并提供远程支持服务。

预测性维护工具isa.guard：实时设备诊断

借助服务品牌Blueserv旗下的预测性维护工具isa.guard，设备的维护需求可以被精准预测--便于保持系统的最佳状态和延长使用寿命。“问题应该在变得更严重甚至发生之前就被发现。这使得客户能够主动规划干预措施，最大化延长设备使用寿命。”Blueserv吹膜挤出部门总监Christian Hoffmann解释道。他诙谐地补充道：“我们开发的isa.guard是一颗‘水晶球’，能让我们预见未来。”通过分析大量的数据和传感器信息，isa.guard为设备提供实时诊断。这使得客户能够全天候地掌握吹膜生产状况。此外该工具还提供具体的行动建议，使客户能及时、有针对性且高效地做出响应。

isa.io：详细且灵活的设备状态信息

模块化软件平台isa.io支持对过程数据进行比对分析，从而优化设备性能并提高效率。“这为我们客户提供了对所有细川阿尔派生产线的绝佳概览--包括执行有针对性的深度挖掘来进行深度分析的选项。推送通知和许多其它功能也可以根据需求定制。”Christian Hoffmann解释道。

Assistance systems make system operation easier:

The heart of system automation at Hosokawa Alpine is the ExVis process visualisation software. Among other things, it includes a start-up assistant that makes it easier to start up the system. The settings for a film formulation are stored in the software. This information allows operators to start up the system in four automated steps without having process engineering know-how themselves. The company offers an operating device for the film take-off, which can be connected to the take-off or the collapsing system and operated on site. This gives the operator immediate access to the connected component.

Automation solutions increase efficiency and productivity:

Hosokawa Alpine also supports blown film ma-

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The predictive
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recognise
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early stage and
intervene if
necessary



ufacturers with various automation solutions to optimise the use of their systems, speed up processes and measurably increase productivity. This includes an automatically adjustable cooling ring insert. Here, the optimum setting for the cooling air supply can be saved and automatically re-started. The one-touch change included in ExVis includes preset format changes and reproducible settings for the collapsing system and side gussets. The software package thus enables accelerated start-up of a film format and fast switching between different formats. This minimises changeover times and the associated material losses and offers film manufacturers a high degree of flexibility.

Monitoring systems for smooth production: In order to keep the productivity of the systems as high as possible, Hosokawa Alpine provides a system monitoring system that immediately visualises malfunctions in operation and production and enables them to be rectified quickly. A camera system with various cameras on the take-off, winder and MDO produces images that can then be called up via the operator terminal. This enables an overview from the control panel, even in areas of the system that are not visible. In an emergency, the remote service from Hosokawa Alpine Blueserv, the company's service brand, can quickly access the system.

Predictive maintenance with isa.guard: machine diagnostics in real time: With the predictive maintenance tool isa.guard from Blueserv, maintenance requirements can be precisely predicted - for maximum system availability and an extended service life. "Problems are recognised before they become critical or even arise. This allows customers to plan interventions proactively and maximise the uptime of their systems," explains Christian Hoffmann, Director Blueserv Blown Film Extrusion. He adds with a wink: "With isa.guard, we have developed a kind of crystal ball that allows us to look into the future."

By analysing a wide range of data and sensors, isa.guard provides a real-time diagnosis of the machine's condition. This gives customers full transparency about their blown film production - around the clock. In addition, concrete proposals for action are provided that enable a targeted and efficient response in good time.

isa.io: information about the machine status - detailed and flexible: The modular software platform isa.io enables a comparative analysis of process data to optimise performance and increase efficiency across all machines. "This gives our customers an excellent overview of all Alpine blown film lines - including the option of carrying out targeted deep dives for detailed analyses. Push notifications and many other functions can also be customised on request," explains Christian Hoffmann.

► Hosokawa Alpine Aktiengesellschaft
www.hosokawa-alpine.com

用于精密质量控制的QC离线测量设备

QC Off-Line Measuring Devices for Precision Quality Control



QC2-线材测量

QC 2 – Wiremeasurement

仲巴赫电子 (Zumbach Electronic) -在线测量解决方案领域超过60年的世界领导制造商-近期推出了其最新开发的精密测量技术：QC非接触式离线测量站，这些新技术为电线，电缆和管材样品提供了便捷，精确且可重复性的测量。这些系统为制造场景的质量控制树立了新的标杆，确保符合严格的规格要求及实现生产优化。

Zumbach Electronic – the world-leading manufacturer of inline measuring solutions for over 60 years – has recently unveiled its latest innovation in precision measurement technology: the QC non-contact, off-line measuring stations, designed to deliver fast, accurate, and repeatable measurements for wire, cable, and tube samples. These systems set a new benchmark for quality control in manufacturing environments, ensuring compliance with exacting specifications and enabling production optimization.

QC2：电线，电缆，管材样品的先进的测量

QC2系统集成了用于保证无与伦比精度和易用性的尖端组件，该系的组件分别为一个高精直径测量头，一个为单件测量设计的自动弹出式电动旋转样品支架，和一个配备了专业数据处理软件的USYS-Touch处理器。

此系统是质量控制实验室或工厂车间场景的绝佳选择，为操作员提供了一套用于测量外径和椭圆度的简单且便于重复操作的解决方案。区别于传统的千分尺或机械指示表-这些老方法受校准误差和人员误差的影响-QC2通过避免这些误差并保障了测量结果的准确性。



QC2-单件测量

QC 2 – Piece Measurement

QC2的核心优势：

- 精确且方便的测量方法
- 为生产优化提供快速反馈
- 自动旋转和测量功能的一键启用
- 为精确样品定位设计的旋转支架
- 一键获取综合统计数据（最小值，最大值，平均值，标准差）
- 用于进一步处理的数据上传

- 围绕样品圆周多次测量
- 两种统计方式：
 - 多个样品的单次测量
 - 一个样品的多点测量
- 最小值，最大值，平均值，标准差的即时计算
- 轻松导出数据便于进一步分析

QC4：软管和管材的精密测量

仲巴赫针对软管和管材的应用提供了QC4系统，该系统可以测量外径及计算内径和管壁厚度。与QC2系统同样，QC4提供快捷，精确的结果并可部署于质量控制实验室和工厂车间，为操作员测量和对挤出型产品的采样提供了一套简单且可重复操作的解决方案。

QC4的核心优势：

- 在参考引脚上轻松部署

QC2和QC4系统都能及时反馈样品是否符合给定公差范围内的规格，并帮助制造商：

- 减少废品和返工
 - 优化生产工艺
 - 持续保证稳定的产品质量
- 凭借其精确，迅速，方便的设计，仲巴赫的QC系统代表着电线，软管和管材质量保证的一大进步。

EXTRUSION GLOBAL

- ▶ News about relevant products and events
- ▶ Detailed reviews of various smart technologies
- ▶ Case studies from processors
- ▶ English, German, Russian and Chinese

- ▶ Video clips demonstrating smart equipment in live action
- ▶ Latest magazines available for reading and downloading
- ▶ Weekly e-mail newsletters

www.extrusion-global.com

QC 2: Advanced Measurement for Wire, Cable, and Tube Samples

The QC 2 system combines cutting-edge components to provide unparalleled accuracy and ease of use, and consists of a high-precision diameter measuring head, a motorized rotating sample holder with automatic sample ejection for piece measurement, and a USYS-Touch processor with specialized software for data evaluation.

This system is ideal for quality control laboratories or factory floors, offering operators a simple, repeatable solution for measuring outside diameter and ovality. Unlike traditional micrometers or mechanical indicators- which can suffer from calibration errors or operator variability - the QC 2 guarantees consistent results regardless of user input.

Key advantages of the QC 2:

- Accurate and user-friendly measurement method
- Quick feedback for production optimization
- Automatic rotation and measurement start with a single key press
- Specially designed rotating holder for precise sample positioning
- Comprehensive statistics (min, max, average, standard deviation) at the touch of a button
- Data upload capability for further processing

QC 4: Precision for Hose and Tube Samples

For hose and tube applications, Zumbach offers the QC 4 system, which measures outside diameter and calculates inside diameter and wall thickness. Like the QC 2, it delivers fast, accurate results and can be deployed in both QC

labs and on the plant floor, providing operators with a simple and repeatable solution for measuring parts or cut samples of extruded products.

Key advantages of the QC 4:

- Simple placement on a reference pin
- Multiple measurements around the sample circumference
- Two statistical modes:
 - o One measurement across several samples
 - o Several measurements on one sample
- Instant calculation of min, max, average, and standard deviation
- Easy data export for advanced analysis

Both QC 2 and QC 4 provide immediate feedback on whether parts meet specification within given tolerances, helping manufacturers:

- Reduce scrap and rework
- Optimize production processes
- Ensure consistent product quality

With their accuracy, speed, and operator-friendly design, Zumbach's QC systems represent a significant step forward in quality assurance for wire, cable, hose and tube manufacturing.

► ZUMBACH Electronic AG
 仲巴赫电子股份公司
 P.O. Box CH-2552 Orpund, Switzerland
 sales@zumbach.ch, www.zumbach.com



QC4-单件测量

QC 4 – Piece Measurement

提出了稳定回收和高效挤出的解决方案 Solutions for Stable Recycling and Efficient Extrusion



MRS挤出机在K展会上亮相

Gneuss MRS extruder at K show 2025

德国塑料回收和加工机械及部件制造商格诺斯(Gneuss)将在2026年中国国际塑料展览会(Chinaplas 2026)上展示一系列解决方案，旨在帮助加工商提高运营效率。这些解决方案将帮助加工商实现更高的工艺稳定性、更低的能耗、更少的停产次数以及始终如一的高品质产品。重点内容包括OMNI回收系统、MRS挤出技术以及格诺斯旋转过滤系统（包括RSFgenius系列）。这些技术支持加工商即使在处理具有挑战性的物料时也能稳定运行，从而降低能源和物料消耗，并高效升级现有生产线——无论是在回收领域还是在传统的挤出和混炼领域。

Gneuss, a German manufacturer of machinery and components for plastics recycling and processing, will present solutions at Chinaplas 2026 to help processors operate more economically. These solutions will enable processors to achieve higher process stability, reduced energy consumption, fewer production stops, and consistently high product quality. Key topics include OMNI recycling systems, MRS extrusion technology and Gneuss rotary filtration systems, including the RSFgenius series. These technologies support processors in running stable operations even with challenging material qualities, reducing both energy and material consumption and upgrading existing lines efficiently – in recycling as well as in conventional extrusion and compounding.

OMNI回收系统——加工效率更高的高品质回收

再生料的需求持续增长，而进料的特性却常常波动较大。OMNI回收系统旨在可靠地应对这些变化，并以经济的方式生产高质量的再生料。根据应用的不同，该系统可以处理多种聚合物，包括PET、聚烯烃和苯乙烯类聚合物。

主要关注点在于生产高品质再生料，以满足高纯度应用的需求，包括基于美国和欧洲相应监管评估的食品接触应用解决方案。工艺稳定性、可重复的产品质量和低运营成本是关键目标，这尤其得益于高效的脱挥功能和运行过程中的连续熔体过滤。

MRS挤出技术——高效脱挥是提升质量、产量和节能的关键

Gneuss技术的核心要素是MRS挤出技术。它将成熟的单螺杆技术与专用的多螺杆部分相结合，显著增加了真空条件下的熔体接触表面积。因此，挥发物、水分和产生异味的成分能够被高效去除。

对于加工商而言，这意味着产品质量更佳、更稳定，气味更少，凝胶或光学缺陷更少，即使处理难加工的物料，工艺也更加稳健。同时，由于许多应用无需复杂的预干燥步骤，因此可以降低能源和设备需求。这不仅降低了能源成本，简化了生产线设计，还减少了潜在的操作失误。

旋转过滤系统——稳定工艺的连续过滤

稳定的熔体压力和一致的过滤对于产品质量的均匀性和经济性至关重要。Gneuss 旋转过滤系统即使在污染水平波动较大的情况下也能实现连续熔体过滤，而不会中断生产。

RSFgenius 系列尤其将恒压过滤与高效反冲洗相结合，实现自动自清洁。这有助于最大限度地减少停机时间，降低操作人员的工作量和更换滤网的需求，并减少材料损失。用户将受益于更稳定的生产过程、更低的废品率和更高的整体生产效率——无论是在回收利用还是在要求苛刻的挤出应用中。

改造与流程优化——无需全部再投资即可提升效率

另一个重点是改造和优化项目。在许多情况下，通过对现有生产线进行现代化熔体过滤和挤出技术的升级改造，即可实现显著的性能提升——例如，提高工艺稳定性、减少停机时间、提升产量和降低运营成本。这样无需对现有生产线进行全面投资，即可提高效率。

OMNI recycling systems – high-quality recyclates with high process efficiency

Recyclate requirements continue to rise, while the properties of incoming material streams often fluctuate significantly. OMNI recycling systems are designed to reliably handle these variations and to produce high-quality recyclates in an economical way. Depending on the application, a wide range of polymer streams can be processed, including PET, polyolefins and styrenics.

A major focus is the production of high-quality recyclates for applications with high purity requirements, including solutions for food contact applications, based on corresponding regulatory assessments in the United States and Europe. Process stability, reproducible product quality and low operating costs are key targets, supported in particular by efficient devolatilization and continuous melt filtration during operation.

MRS extrusion – efficient devolatilization as the key to quality, throughput and energy savings

A central element of Gneuss technology is MRS extrusion. It combines proven single-screw technology with a de-

MRS专利挤出系统，配备25毫巴真空系统

Patented MRS Extrusionssystem with 25mbar vacuum system



dedicated multi-screw section that significantly increases the melt surface area under vacuum. As a result, volatiles, moisture and odor-forming components can be removed very efficiently.

For processors, this means improved and more consistent product quality, reduced odor, fewer gels or optical defects, and a more robust process even with difficult materials. At the same time, energy and equipment requirements can be reduced because in many applications no complex pre-drying is required. This lowers energy costs, simplifies line design and reduces potential sources of operational errors.

Rotary filtration systems – continuous filtration for stable processes

Stable melt pressure and consistent filtration are essential for uniform product quality and economical operation. Gneuss rotary filtration systems enable continuous melt filtration without production interruptions – even with strongly varying contamination levels.

The RSFgenius series in particular combines constant-pressure filtration with efficient backflushing for automatic

self-cleaning. This helps minimize downtime, reduce operator effort and screen change requirements, and limit material losses. Users benefit from a more stable production process, lower scrap rates and higher overall line efficiency – both in recycling and in demanding extrusion applications.

Retrofit and process optimization – efficiency improvements without full reinvestment

Another focus is on retrofit and optimization projects. In many cases, significant improvements can already be achieved by upgrading existing lines with modern melt filtration and extrusion technology – for example through increased process stability, reduced downtime, improved output and lower operating costs. This enables efficiency gains without the need for a complete new line investment.

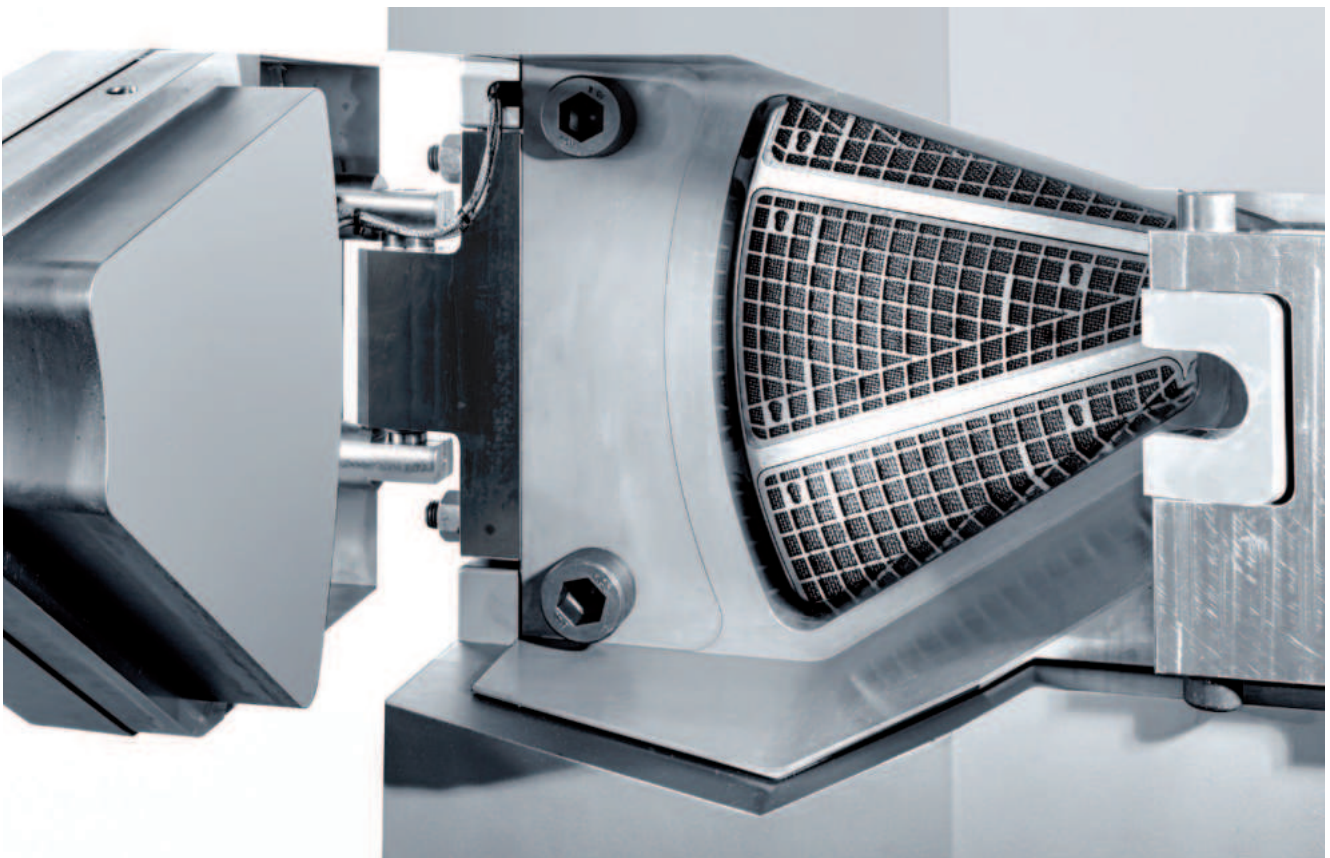
► Gneuss Kunststofftechnik GmbH
格诺斯塑胶技术有限公司

Moenichhusen 42, 32549 Bad Oeynhausen, Germany
www.gneuss.com

CHINAPLAS 2026: Stand 2.1G01

Gneuss专利RSFgenius旋转过滤系统：全自动，工艺和压力稳定，集成自清洁功能。过滤网细节图

Patented Gneuss RSFgenius rotary filtration system: fully automatic, process- and pressure-stable, with integrated self-cleaning. Detail view of the screens



2026年Chinaplas国际橡塑展我们将展示什么？

What's up at Chinaplas 2026?



► CPP/MDO

流延膜生产线

带有集成的 MDO 单元

CPP/MDO Cast film line with integrated MDO-unit

SML近期的研发集中在提升产能、生产效率和设备能效以及提高可回收性以促进循环经济发展方面。

在2026年Chinaplas国际橡塑展上，SML将重点展示高效生产易回收单一材质薄膜的新型多功能流延薄膜生产线，以及生产无菌包装材料的先进TRIPLEX挤出涂覆复合生产线。

In recent months, SML's development efforts have focused on increasing capacity, productivity and efficiency as well as promoting recyclability in the sense of a circular economy.

At Chinaplas 2026, SML will focus on its multi-functional cast film system including state-of-the-art MDO technology for the efficient production of easy-to-recycle mono-material film and its advanced TRIPLEX coating and laminating line for aseptic cardboard packaging.

配置MDO单向拉伸单元的流延薄膜生产线，提供可持续包装解决方案

除可生产CPP、CPE、流延PET和阻隔膜等标准产品外，SML的新型流延薄膜生产线配备了进一步开发的MDO单元，是专为生产易于回收的单向拉伸薄膜而设计的。

- 功能多样：产品范围从标准食品和非食品包装到厚度在15 – 60 μm的易回收自立袋薄膜
- 先进的MDO单元 – 改善薄膜性能
- 维护简便

Triplex涂覆复合生产线以一步简单而经济高效的工艺生产无菌包装材料

SML的Triplex涂覆复合生产线为生产用于乳品或果汁的液体纸板包装材料带来全新方法。该生产线能够以同样的高质量加工薄纸和硬纸板。

- ▶ 优化产品转换 - 减少废料
- ▶ 性价比高
- ▶ 操作舒适，维护简便

SML开发制造的机械设备在可靠性、服役年限和产能质量方面均代表着高标准。

Cast Film Line with MDO unit for sustainable packaging solutions

Beside standard products, such as CPP, CPE, Cast-PET and barrier films, SML's new cast film line fitted with a advanced MDO unit is especially designed to process mono-oriented films for easy recycling.

- ▶ Wide functional range: standard food and non-food packaging to easy-to-recycle stand-up pouches in a thickness range of 15 – 60 µm

- ▶ State-of-the art MDO technology – improved film properties
- ▶ Simple maintenance

Triplex Coating Lines for aseptic packaging in one simple and cost-effective process

SML's Triplex coating and laminating lines represent a new approach in the manufacturing of liquid packaging board e.g. for dairy products or fruit juices. It is designed to process thin paper and rigid paperboard at an equally high quality.

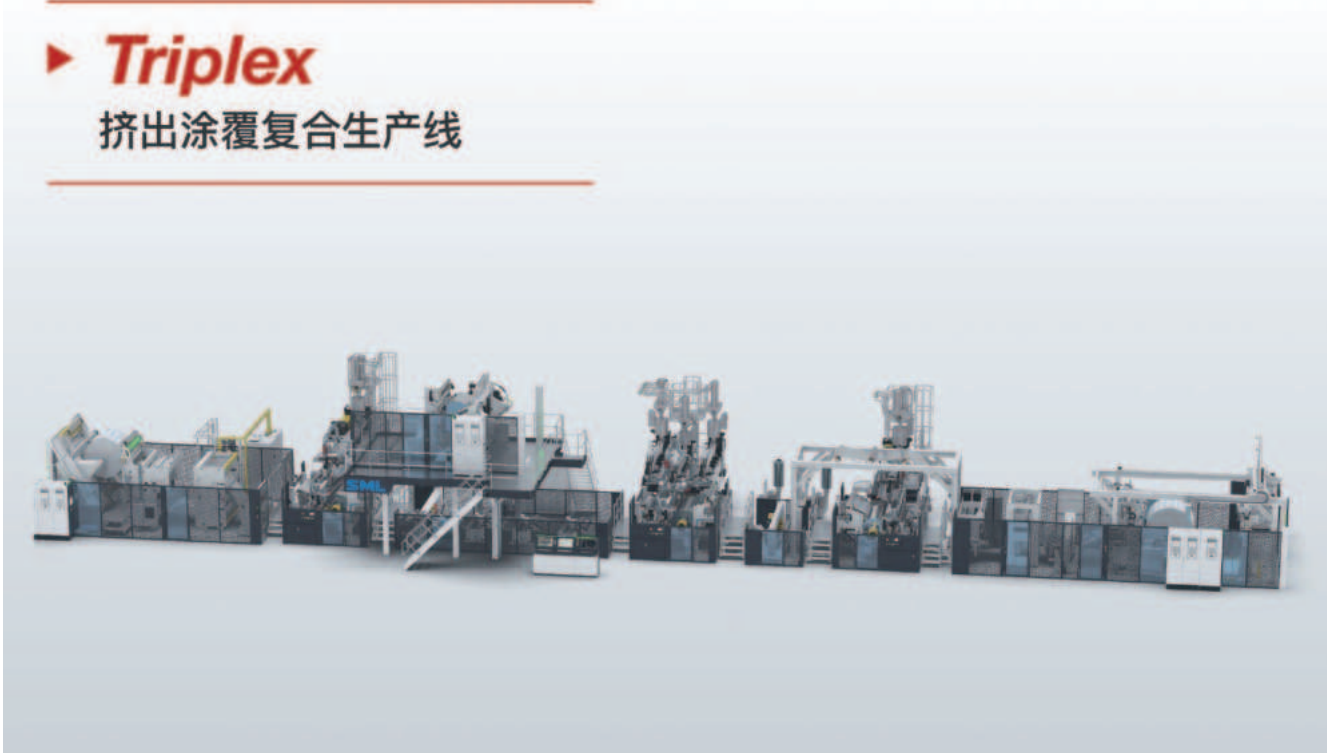
- ▶ Optimised product change overs -low waste
- ▶ Best cost-performance ratio
- ▶ Comfortable operation and good accessibility

All machinery developed and manufactured by SML stand for high standards in terms of reliability, longevity and output quality.

- ▶ SML Maschinengesellschaft mbH
市场部经理
Gewerbepark Ost 32, A-4846 Redlham, Austria
www.sml.at
CHINAPLAS 2026: Stand 2.1A56

TRIPLEX Extrusion coating & laminating line

▶ **Triplex** 挤出涂覆复合生产线



速度、幅宽、高稼动率：引领未来的薄膜拉伸解决方案

Speed, Width, Uptime: *Tomorrow's Film Stretching Solutions*



布鲁克纳机械将携最新薄膜拉伸技术，亮相2026年上海中国国际橡塑展（2.1号馆G54展位），集中展现其高产量、低生产成本与卓越效率三大维度的融合优势，为行业带来全方位解决方案。

Brückner Maschinenbau will showcase its latest film stretching technologies at Chinaplas 2026 in Shanghai (Hall 2.1, Stand G54), highlighting the company's unique combination of high output, low production costs, and exceptional efficiency.

双向拉伸聚丙烯薄膜（BOPP）—— 高产赋能未来生产

布鲁克纳机械BOPP薄膜技术实力强劲，可实现700米/分钟的生产速度、10.4米的生产线幅宽，以及10吨/小时的产量，能广泛适配各类高端包装薄膜的生产需求。这一核心性能组合，为薄膜企业实现高效生产与灵活工艺切换提供了可靠支撑。

面向中国市场，布鲁克纳机械专为研发定制的12米幅宽BOPP薄膜拉伸生产线即将重磅推出。这条新一代生产线在通用薄膜领域的产能、效率与品质上树立了行业新标杆，不仅能帮助企业显著降低单位投资与生产成本，更成为布局下一代BOPP生产、抢占市场先机的优选方案。

电池隔膜（BSF）—— 电池隔膜解决方案

布鲁克纳机械电池隔膜生产线年产能可达5亿平方米合格成品膜，稳居行业产量首位，为企业构建长期市场竞争力奠定坚实基础。针对高抗穿刺、超高拉伸工艺的电池隔膜（厚度可低至5微米），公司还可提供定制化生产线布局，精准匹配细分需求。

双向拉伸聚乙烯薄膜（BOPE）—— 先进的单一材质包装解决方案

顺应全球可持续发展与包装回收利用的趋势，布鲁克纳机械研发的双向拉伸聚乙烯高密度薄膜生产线已通过技术验证并成熟应用。该产线可与聚乙烯吹塑薄膜产线协同运作，亦可兼

容双向拉伸聚乙烯线性低密度薄膜生产，助力企业实现100%聚乙烯单材质包装，践行绿色发展理念。

依托新一代产线布局，企业还可加工更高密度、更低熔体流动速率的聚乙烯原料，进一步拓展产品应用场景。

双向拉伸聚酯薄膜 (BOPET) —— 包装薄膜的卓越生产效率

为攻克包装薄膜高效生产难题，布鲁克纳机械推出专用BOPET生产线，凭借尖端链轨系统，将生产速度提升至700米/分钟，实现产能与效率的双重突破。

FOK 8.8 滑动式链轨系统是专为特定薄膜优化的核心设备，适用于厚度不超过36 微米的薄膜生产，最高生产速度可达700 米/分钟。同时通过简化机械结构，大幅降低设备维护成本与工作量，助力企业控制总拥有成本。

FOK 5.9 辊式链轨系统是布鲁克纳机械的最新研发成果，搭载性能卓越的专利弹簧加载轴承系统，适用于厚度不超过75 微米的薄膜生产，最高生产速度可达650 米/分钟。

近期，布鲁克纳机械已向印度一家头部BOPET 薄膜企业交付全球首条700 米/分钟的BOPET 生产线，该产线预计于2027 年正式投产运营。

双向拉伸聚酰胺薄膜 (BOPA) —— 业内最宽幅生产线

借助布鲁克纳机械独家LISIM®技术，其BOPA 生产线实现幅宽突破，分步拉伸产线幅宽达8.4米，同步拉伸产线幅宽达7.4 米，为业内最宽规格。该系列产线可灵活适配各类薄膜拉伸工艺需求，兼顾多样性与稳定性。

双向拉伸聚丙烯电容膜/复合集流体膜 (BOPP-C/CCCF)

数十年来，布鲁克纳机械双向拉伸生产线始终是电容膜领域的品质与工艺稳定性标杆，如今更成功拓展至复合集流体膜生产领域。

基于LISIM®同步拉伸技术的产线及传统分步拉伸产线，均可生产厚度低至2 微米的超薄膜，适配新能源汽车高能量密度应用场景；同时可量产6.8-12 微米厚度的薄膜，满足高压直流输电、风电与光伏逆变器及各类电力电容器的高端需求。

特种薄膜生产线 —— 创新高性能塑料

布鲁克纳机械还为聚四氟乙烯、聚酰亚胺、聚苯硫醚等高端高性能塑料，提供高度定制化生产方案。核心设备横向拉伸

机可在400°C以上高温工况下稳定运行，即便处于极端热环境中，仍能保障生产精度与稳定性，彰显技术硬实力。为响应亚洲市场增长需求，布鲁克纳机械专为中国市场设计的又一条PTFE 薄膜生产线，计划于2027 年正式投产。

BOPP – High Output and Future-Proof Concepts

Brückner's BOPP technology combines a production speed of 700 m/min, a line width of 10.4 m, and an output of 10 t/h, enabling a broad range of high-quality packaging solutions. This performance profile ensures both high efficiency and flexibility for film producers.

Looking ahead, Brückner is going to introduce a 12 m BOPP film stretching line tailored for the Chinese market. This next-generation line sets new industry benchmarks in productivity, efficiency, and quality for commodity film production.

Delivering the lowest specific investment and production costs for film producers, it represents a highly attractive and future-proof entry into next-generation BOPP production.

BSF – Battery Separator Film Solutions

Brückner's battery separator film lines are providing with 500 million m² saleable film the highest output in the industry and ensures a long-term competitiveness.

For high-puncture resistant, ultra-high stretched (down to a thickness of 5 µm) battery separator films, a dedicated line layout is available.

BOPE – Advanced Mono-Material Packaging Solutions

Driven by sustainability and recycling targets, Brückner has developed an already proven biax line layout to produce BOPE-HD films. In combination with PE-blown films or even BOPE-LLD films, it enables 100% PE mono-material packaging. With this new line layout, higher density and lower MI PE grades can be produced.





BOPET – Superior Productivity for Packaging Films

For highest productivity and efficiency, Brückner is offering BOPET-lines for packaging applications with a superior production speed up to 700 m/min, facilitated by cutting-edge chain-track systems. The sliding chain track system FOK 8.8 enables up to 700 m/min production speed and is optimized for a film thickness up to 36 µm. Further unique features are the reduced mechanical complexity, and hence lower maintenance efforts/costs resulting in lowest possible operating costs.

The roller chain track system FOK 5.9 is Brückner's latest development with a superior, patented spring-loaded bearing system for film thicknesses up to 75 µm and a production speed up to 650 m/min.

Recently, Brückner has sold the world's first 700 m/min BOPET line to a leading BOPET film producer in India, which will be in operation within the year 2027.

BOPA – The Widest Lines on the Market

Brückner offers the market's widest production lines – 8.4 m for sequential and 7.4 m for simultaneous stretching thanks to Brückner's unique LISIM® technology – ensuring versatility for various film stretching solutions.

BOPP-C and -CCCF – Capacitor and Composite Current Collector Films

Since decades, Brückner's biax lines for capacitor films and recently also used for composite current collector

films, are the benchmark in film quality and process stability. The LISIM® technology for simultaneous stretching as well as sequential lines enable the production of extremely thin films of down to 2 µm for highest energy density in EV applications as well as thicker films in the range of 6.8 to 12 µm for HVDC in power transmission, wind and solar power inverters and all kinds of other electrical capacitor applications.

Specialty Film Lines – Innovative High-Performance Plastics

Brückner Maschinenbau also offers highly customized production solutions for advanced high-performance plastics such as PTFE, PI, PPS and others. A particular highlight is the Transverse Direction Orienter (TDO), which operates reliably at process temperatures exceeding 400°C, ensuring maximum stability and precision even under extreme thermal conditions.

To meet the growing demand in Asia, another PTFE film production line specifically designed for the Chinese market is scheduled to start in 2027.

► Brückner Maschinenbau GmbH
Königsberger Str. 5-7, 83313 Siegsdorf, Germany
www.brueckner-maschinenbau.com
CHINAPLAS 2026: Stand 2.1G54

全球塑料市场的强强联合 Stronger Together in the Global Plastics Market

玛格集团 (MAAG GROUP) 将参加2026年4月21日至24日在上海举办的国际橡塑展 (Chinaplas) , 并将在**2.1号馆, J61**展台展出其在聚合物加工与制造及管材、软管生产的最新解决方案。这是自玛格集团于2025年6月收购西科拉 (SIKORA) 以来双方第一次联合参展。西科拉是在创新测量, 控制, 检测和分拣技术领域的领先供应商。

The MAAG Group will attend Chinaplas in Shanghai from April 21 to 24, 2026 and will present modern solutions for polymer processing and manufacturing as well as pipe and hose production in **Hall 2.1, Booth J61**. This will be the first time that both companies have presented together in China since the acquisition of SIKORA in June 2025. SIKORA is a leading provider of innovative measurement, control, inspection, and sorting technologies.

“我们的联合参展明确的表明了我们的战略方向。我们提供客户用于聚合物加工和全面质量控制的集成系统,”玛格集团总裁Ueli Thürig强调。“无论泵、过滤器、制粒系统、粉末研磨机、回收方案, 还是用于管材和软管制造的测量及控制系统, 以及检测技术及塑料颗粒的分拣, 我们的产品都能够显著创造附加值。”

新一代M² USG

玛格通过改进M² USG系列将推出一款新型水下拉条造粒系统, 得益于设计优化和额外增加的传感技术, 该系统能提高加工稳定性, 增加产出量并且能够保障更高的颗粒质量。新的造粒系统设计宗旨是实现最大化的设备利用率 (>99% OEE) 及稳定的生产过程。其通过减少停机时间, 降低废品率, 降低运营成本而提高盈利能力。系统的核心是一款新型切割头, 它便于操作和维护并且减少了潜在的操作错误。

用于回收过程的高性能熔体过滤器

玛格集团将同样展出例如ERF350用于塑料回收的连续型熔体过滤器。它的处理量可达到 3,800 千克/小时 (kg/h) 并能处理高达16%的杂质含量。熔体通过旋转的多孔滚筒从外向内流动。如纸张, 木头, 橡胶或金属等杂质会粘附在滚筒外侧并持续被刮除。ERF共有四种型号覆盖了从150到10,000公斤/小时的处理力。除此之外, 四种ECO型号适用于聚酯 (PET) 应用, 这类应用杂质率低, 比如来自生产废料。



MAAG Ettliger高性能熔体过滤器ERF 350

MAAG Ettliger high performance melt filter ERF 350

BAOLI-3拉条造粒机

BAOLI-3是一款用于配混和回收的干切拉条造粒机。该机型配备了德国生产的核心组件, 比如切割工具和拉条喂入装置。三种型号能够实现取决于不同材质和应用场景的, 从20到3,450千克/小时的处理量。其核心优势包括高颗粒质量、长使用寿命、低噪音、操作简便及适用于不同生产环境下的灵活装配。

PURITY CONCEPT V-用于颗粒、碎片和测试板的检测分析

在国际橡塑展上, 西克拉将着重介绍PURITY CONCEPT V, 一款用于颗粒、碎片和测试板的随机取样及分析的离线系统。该系统通过光学摄像头能检测小至50微米 (μm) 的污染物, 例如黑色、彩色斑点和变色。整个分析过程不到一分钟, 还包括一份检测证书及检测到色差的HSV色卡。这个系统为产品质量和安全做出重要贡献。

PURITY SCANNER ADVANCED-用于高要求塑料应用的检测和分拣

随着工程塑料纯净度需求的日益增高, 对可靠质量控制的需求也在不断增长, 无论是高性能塑料氟聚合物的

(fluoropolymers) (如阻燃塑料) 还是普通材料聚丙烯 (PP)。无论是任何应用领域, 高纯净度的材料都至关重要。污染物不仅影响性能, 也可能带来巨大的经济损失。

西科拉的PURITY SCANNER ADVANCED是一款可灵活配置的检测和分拣系统, 该系统结合了最高精度和模块化技术。即使是极小尺寸的关键污染物也能可靠地被检测及分离。并且检测系统和吹扫系统完美协调配合。取决于不同的应用需求, 不同的摄像头型号可被灵活配置。除了可以检测小至25微米黑点的高分辨率光学摄像头外还可搭载X光 (X-ray) 摄像头, X光摄像头专门用于检测金属微粒。另一个亮点是混合式吹扫系统: 客户可以自定义哪些类型的杂质是可以容忍的, 比如尺寸小的或颜色淡的黑点, 可以用更小的吹扫装置将其分离。而对于关键杂质比如金属颗粒, 可以用大面积的吹扫装置将其分离。这种智能化的配合运用最大限度地降低了材料损失 (“漏网之鱼”) 并对经济效益及可持续生产做出巨大贡献。

CENTERWAVE 6000-用于测量壁厚及32至1600毫米管材直径

在管材和软管挤出的测量领域, 西科拉还将展出CENTERWAVE 6000。该系统可在第一次真空罐后无接触的直接测量直径32至1,600毫米 (mm) 的管材。一个持续旋转的收发器和一个强大的处理器通过毫米波技术精确测量产品360度圆周上的直径与壁厚。这有助于挤出工具的中心定位, 减少材料损耗及成本。

X-RAY 6000 PRO-用于测量多层产品的直径, 包括最小壁厚

西科拉推出的X-RAY 6000 PRO是一款基于X光技术的创新型系统, 该系统在多层管材与软管挤出生产线上持续提供壁厚、偏心率、内外径参数的测量。测量数据清晰的显示在ECOCONTROL 6000处理器的显示器上。X-RAY 6000 PRO能灵活的运用于挤出机之后, 两个真空罐/冷却段间, 或者在生产线的末端进行冷态测量。从运行的第一天起, 该系统就能精确的将壁厚降低至最小允许值, 从而显著的节省材料和成本。“我们的会展将有力的阐明如何通过现代测量技术推动自动化并保障持续生产。”西科拉总经理Holger Lieder说道。

玛格集团和西科拉将在国际橡塑展上联合参展, 共同展示他们在塑料加工整个价值链上的专业能力。“我们的目标不仅是提供给客户一流的设备与系统, 也将客户视为长期合作伙伴并通过深厚的工艺专业能力为客户提供支持。”Ueli Thürig总结道。

"Our joint trade fair appearance clearly shows where we are heading strategically. We offer our customers integrated systems for polymer processing and comprehensive quality control," emphasizes Ueli Thürig, President of the MAAG Group. "Whether pumps, filters, pelletizing systems, powder mills, recycling solutions, or measuring and control systems for pipe and hose production, as well as technologies for inspecting and sorting plastic granulate – our products create clear added value."

New generation M² USG

With the revised M² USG series, MAAG is introducing a strand pelletizing system that enables higher process stability, increased throughput, and improved pellet quality thanks to design optimizations and additional sensor tech-

nology. The pelletizer is designed for maximum plant availability (>99% OEE) and stable production processes. Reduced downtime and lower scrap rates lower operating costs and increase profitability. At the heart of the system is the new cutting head, which facilitates operation and maintenance and reduces potential operating errors.

High-performance melt filters for recycling processes

MAAG offers continuous melt filters such as the ERF 350 for plastics recycling. It processes throughputs of up to 3,800 kg/h and can handle contamination levels of up to 16%. The melt flows from the outside to the inside through a rotating drum with numerous holes. Contaminants such as paper, wood, rubber, or metal stick to the outside of the drum and are continuously scraped off. A total of four ERF models cover throughput ranges from 150 to 10,000 kg/h. In addition, four ECO models are available for PET applications with lower levels of contamination, such as from production waste.

BAOLI 3 strand pelletizer

The BAOLI 3 is a dry-cut strand pelletizer for compounding and recycling. The machine uses key components such as cutting tools and strand feeders that are manufactured in Germany. Three model sizes enable throughputs between 20 and 3,450 kg/h, depending on the material and application. Key advantages include high pellet quality, long service life, low noise level, ease of use, and flexible installation options for different production environments.

PURITY CONCEPT V for inspection and analysis of pellets, flakes, and test plates

At Chinaplas, SIKORA will present, among other things, the PURITY CONCEPT V, an offline system for random sampling and analysis of granules, flakes, and test plates. "The system uses an optical camera to detect contaminants such as black or colored specks and discolorations from

新型水下拉条造粒机M2-USG

New underwater strand pelletizer M2-USG



50 µm. The analysis takes less than a minute – including a test certificate and HSV color chart of the detected color deviations. The system thus makes a significant contribution to product quality and safety.

PURITY SCANNER ADVANCED for inspection and sorting of demanding plastic applications

With increasing demands on the purity of technical plastics, the need for reliable quality control is also growing. The same applies to high-performance plastics such as fluoropolymers (e.g., flame-retardant plastics) or standard materials such as polypropylene (PP). In all areas of application, flawless material quality is crucial. Contaminants can not only impair functionality, but also cause significant economic losses.

With the PURITY SCANNER ADVANCED, SIKORA offers a configurable inspection and sorting system that combines maximum precision with modular technology. Critical contaminants – even those of minimal size – are reliably detected and automatically sorted out.

The detection and blow-out systems work in perfect coordination. Depending on the application, different camera types can be integrated. In addition to high-resolution optical cameras that detect black specks from 25 µm, an X-ray camera is also available as an option – specifically for the detection of metallic particles in granulate. Another highlight is the hybrid blow-out system: Customers can define which types of impurities are tolerable – for example, small, light-colored black specks – and sort them out with a smaller blow-out unit. For critical contaminants such as metal particles, however, a large-area blow-out is used. This intelligent interaction minimizes unnecessary mate-

rial loss ("bycatch") and contributes significantly to economical and sustainable production.

CENTERWAVE 6000 for measuring the wall thickness and diameter of pipes from 32 to 1,600 mm

In the field of measurement technology for pipe and hose extrusion, SIKORA also presents the CENTERWAVE 6000. The system measures pipes with diameters from 32 mm to 1,600 mm directly after the first vacuum tank without contact. A continuously rotating transceiver and a powerful processor system use millimeter wave technology to accurately measure the diameter and wall thickness over 360 degrees of the product circumference. This facilitates the centering of the extrusion tools, reduces material consumption, and lowers costs.

X-RAY 6000 PRO for measuring all dimensions of multilayer products, including the minimum wall thickness

With the X-RAY 6000 PRO, SIKORA introduces an innovative system based on X-ray technology that continuously provides measurement values for wall thickness, eccentricity, and inner and outer diameters of multi-layer tubes and pipes in extrusion lines. The measurement results are clearly displayed on the monitor of the ECOCONTROL 6000 processor system. The X-RAY 6000 PRO can be flexibly used after the extruder, between two vacuum tanks/cooling sections, or at the end of the line for cold measurement. From the very first day of operation, the system enables precise reduction of the wall thickness to the minimum permissible value, thus ensuring significant material and cost savings. "Our trade fair presentation impressively illustrates

how modern measurement technology drives automation and enables sustainable production," says Holger Lieder, Managing Director at SIKORA.

With their joint trade fair presentation at Chinaplas 2026, the MAAG Group and SIKORA are demonstrating their combined expertise along the entire value chain of plastics processing. "Our aim is not only to provide customers with first-class machines and systems, but also to support them as a long-term partner with in-depth process expertise," summarizes Ueli Thürig.

PURITY SCANNER ADVANCED检测分离塑料颗粒

The PURITY SCANNER ADVANCED inspects and sorts plastics granulate



► MAAG Group
www.maag.com
► Sikora GmbH
www.sikora.net

CHINAPLAS 2026: Stand 2.1J61

重點介紹適用於先進能源材料的 TechSlitter CHRI，以及用於 BOPP 和 BOPET 薄膜生產的 PrimeSlitter BlackLine

TechSlitter CHRI for Advanced Energy Materials and PrimeSlitter BlackLine for BOPP and BOPET Film Production Highlighted

在2026橡塑展上，分切收卷解決方案提供商康甫（Kampf）將展示其在高性能薄膜及技術材料分切與收卷領域的最新技術成果。展會重點將聚焦於 TechSlitter CHRI 分切機——這款模塊化設備為標準電容器薄膜應用領域樹立了新的標杆；同時，升級版 PrimeSlitter 分切機也將同台亮相，專為大規模 BOPP 和 BOPET 薄膜生產打造。

At Chinaplas 2026, Kampf will present its latest innovations in slitting and winding technology for high-performance films and technical materials. The focus of the exhibition will be the TechSlitter CHRI, a modular slitting machine setting new benchmarks for standard capacitor film applications, alongside the enhanced PrimeSlitter for large-scale BOPP and BOPET film production.



用於標準電容器薄膜應用的全新 Kampf TechSlitter CHRI

The new Kampf TechSlitter CHRI for standard capacitor film applications (Picture: Kampf)

TechSlitter CHRI—標準電容器薄膜應用領域的標杆

憑借康甫在加工高難度材料方面久經考驗的專業技術，TechSlitter CHRI 提供了一種符合最高質量標準的解決方案，並確保在電容器薄膜生產中實現卓越性能。該設備專為標準電容器薄膜的穩定、精密加工而開發，適用於各種金屬化及非金屬化 BOPP 和 PET 薄膜。

TechSlitter CHRI 採用模塊化架構，作為一款高度靈活且經濟高效的分切解決方案，能夠精準適應客戶的個性化需求以及未來的生產需求。這使其成為在電氣化、可再生能源和電力電子等快速增長的市場中，從事先進技術材料的薄膜加工企業的理想選擇。

得益於先進的分切技術，該設備可實現電容膜加工所需的直切和波浪切兩種裁切工藝。這確保了切邊精準、質量穩定且精度高。精準的卷材張力控制保證了對敏感薄膜的輕柔處理，而

集成的卷材控制系統則確保了工藝穩定，產品品質始終如一。

該平台專為實現高工藝穩定性和工業級性能而設計，根據配置不同，設備運行速度可達每分鐘500米。

在日常運行中，TechSlitter CHRI 還以其人性化的設計和高效的操作而脫穎而出。諸如快速卸除成品卷等功能，有助於最大限度地減少停機時間並提高整體生產效率。

PrimeSlitter BlackLine—匹配新式主線的初次分切設備

本屆展會的另一大亮點是經過升級的 PrimeSlitter BlackLine CHRO，該設備專為 BOPP 和 BOPET 薄膜的高性能加工而設計。該設備工作寬度可達 12.8 米，並預留了未來擴展至 13 米寬度的空間；最高運行速度可達 1,500 米/分鐘，且放卷機可處理重達 50 噸的卷材大母卷，其在生產效率和加工精度方面樹立了新標杆。

这些大型分切系统使薄膜生产商能够高效运行现代挤出生产线，同时确保出色的卷材质量和工艺稳定性，从而支持BOPP薄膜行业全球产能扩大的趋势。

生命周期服务与数字化—确保长期投资安全

无论是维护、故障排除还是工艺优化，康甫生命周期服务都能提供量身定制的、符合特定生产需求的顶尖解决方案。在设备运行的各个阶段，我们都能提供全面的技术支持。

在2026年中国国际橡塑展（Chinaplas 2026）上，模块化升级方案将成为重点展示内容，这些方案有助于延长设备使用寿命、减少停机时间，并确保系统技术始终处于最新水平。我们同时诚邀使用阿特拉斯设备的客户也莅临我们的展位，与生命周期服务团队交流，深入了解针对其设备提供的全面服务方案。这些解决方案旨在进一步优化生产流程、提高效率，并最大限度地提升设备的整体性能。

薄膜产业未来的合作伙伴

在电气化、可再生能源以及高性能薄膜需求不断增长等全球大趋势的推动下，该行业正持续快速发展。凭借TechSlitter CHRI、高产能PrimeSlitter等技术以及全面的生命周期服务，康甫进一步巩固了其作为全球薄膜制造商可靠技术合作伙伴的地位。

诚邀2026年橡塑展展会的来宾前来探索这些创新成果，并与康甫的专家共同探讨未来的生产挑战。

关于 Kampf 有限公司

一百多年来，Kampf 有限公司一直被公认为分切与复卷技术领域的领导者。公司在全球拥有约800名员工，开发和制造用于软包装薄膜、柔性包装材料、复合材料、层压材料、铝箔、无纺布、标签材料以及特种纸的设备。通过联网设备、自动化、数字化以及全面的服务，公司不断优化客户的生产流程。

TechSlitter CHRI – the benchmark for standard capacitor film applications: With Kampf's proven expertise in processing demanding materials, the TechSlitter CHRI delivers a solution that meets the highest quality standards and ensures superior performance in capacitor film production. The machine has been specifically developed for reliable and precise processing of standard capacitor films and is suitable for a wide range of metallised and non-metallised BOPP and PET films.

Designed as a highly flexible and cost-efficient slitting solution, the modular architecture of the TechSlitter CHRI enables precise adaptation to individual customer requirements and future production needs. This makes it an ideal choice for converters processing advanced technical materials in fast-growing markets such as electrification, renewable energy and power electronics.

Thanks to its advanced slitting technology, the machine enables both straight and wave cuts, as required for capacitor film applications. This ensures precise slitting edges, consistent quality and high accuracy. Controlled web tension guarantees gentle handling of sensitive films, while the integrated web control system ensures stable processes and consistently high product quality.

The platform is engineered for high process stability and industrial performance, with machine speeds of up to 500

m/min, depending on configuration and slitting system. In daily operation, the TechSlitter CHRI also stands out for its user-friendly design and efficient handling. Features such as the quick removal of finished rolls help to minimise downtime and maximise productivity.

PrimeSlitter BlackLine – primary machine reaching new dimensions: Another highlight at the show is the enhanced Prime-Slitter BlackLine CHRO, designed for high-performance processing of BOPP and BOPET films. With a working width of up to 12.8 metres and preparation for future widths of up to 13 metres, a speed of up to 1,500 m/min and unwinders capable of handling roll weights of up to 50 tonnes, the machine sets new standards in productivity and precision.

These large-scale slitting systems enable film producers to efficiently operate modern extrusion lines while ensuring excellent roll quality and process stability, supporting the global trend towards increasing production capacities in the BOPP film industry.

Lifecycle Services & Digitalization – ensuring long-term investment security: Whether maintenance, troubleshooting or process optimization is required, the Kampf Lifecycle Service provides best-in-class solutions tailored to specific production requirements. Comprehensive support is ensured across all stages of machine operation.

At Chinaplas 2026, modular upgrade packages are a key focus, helping to extend machine lifetimes, reduce downtime and keep systems technologically up to date. Customers operating Atlas machines are also invited to visit the Lifecycle Service team at the booth to learn more about the extensive service portfolio available for their equipment. These solutions are designed to further optimize production processes, increase efficiency and maximize overall machine performance.

Partner for the future of the film industry: Driven by global megatrends such as electrification, renewable energy and the growing demand for high-performance films, the industry continues to evolve rapidly. With technologies such as the TechSlitter CHRI, the high-capacity PrimeSlitter and comprehensive lifecycle services, Kampf reinforces its position as a reliable technology partner for film manufacturers worldwide.

Visitors to Chinaplas 2026 are invited to explore these innovations and discuss future production challenges with Kampf's experts.

About Kampf GmbH: Kampf GmbH has been recognized as a leader in slitting and winding technology for over 100 years. Around 800 employees are employed worldwide, and machines for flexible films, flexible packaging, composites, laminates, aluminum foils, nonwovens, label materials, and specialty papers are developed and manufactured. Customer production is optimized through networked machines, automation, digitalization, and comprehensive services.

► Kampf GmbH
Mühlener Str. 36-42, 51674 Wiehl, Germany
www.kampf.de
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在德国杜塞尔多夫包装展览会 (interpack)、中国国际橡塑展 (Chinaplas)、沙特橡塑展 (Saudi Plastics & Petrochem) 上，贝克姆集团 (Bekum Group) 将自己定位为面向高标准市场的包装专家。贝克姆重点聚焦于产品保护、工艺稳定性和高性能材料应用领域-涵盖从制药行业无尘室应用到聚酯 (PET) 把手瓶，再到用于敏感介质的工业包装。

At interpack, Chinaplas and Saudi Plastics & Petrochem, Bekum Group positions itself as a packaging specialist for technically demanding markets. The focus is on applications where product protection, process stability and material performance are mission critical – ranging from pharmaceutical cleanroom applications to PET handle bottle and large industrial packaging for sensitive media.

医疗与健康：兼容无尘室的包装解决方案

在医药领域，对颗粒物控制和工艺的可重复性及生产档案的记录都有最高标准的要求：

- 一致的壁厚分布与稳定的尺寸精度
- 生产过程的档案记录
- 可验证的工艺参数

贝克姆的设备理念专为受控生产环境，甚至是无尘环境下而生。机电轴确保精确、可重复的动作序列和稳定的循环周期。无论是单层还是多层技术均可实现特定的阻隔性能--例如用于液体药品、诊断溶液或消毒剂的包装。结合均匀的熔体制备，精密的挤出头技术和工艺稳定的设备控制，确保持续且稳定的高包装质量--这是在高标准市场中立足的基本要求。

PET把手瓶：面相消费级和家用市场的卓越表现

作为聚酯挤出吹塑成型应用高技术要求领域的领头羊，贝克姆推出了采用100%可回收聚酯材料制成的晶莹剔透的把手瓶。在这一领域，产品的透明度、人体工学设计及设计的灵活性是致胜的关键因素。典型应用包括：

- 食品相关应用
- 家用清洁剂
- 洗衣产品和家具护理产品

工业包装：高纯度和危险品应用

在工业包装领域，贝克姆提供涵盖广泛的产品组合--从方形油罐到圆筒到吨桶 (IBC)。在涉及化学品、危险品、添加剂和特殊介质，以及高纯度应用如半导体行业中，会产生特殊需求。在半导体行业中，使用的超纯度化学品不能容忍来自包装材料的污染。关键因素包括高纯度原料、精密的多层结构、优异的表面性能以及大容量容器的容积稳定性。集成了阻隔层的多层技术可提供抗渗透性、减少溶液逸出并加强储存和运输过程中的安全性。贝克姆设备专为生产大型包装设计，具有很高的质量稳定性、精准的锁模力控制和均匀的壁厚分布--这些都是联合国认证包装系统 (criteria for UN-certified packaging systems) 的重要标准。

技术是市场成功的基石

贝克姆在这些市场中的出色表现，基于以下技术：用于实现最优熔体均匀性的螺旋芯棒挤出机头、精密的机电系统、较短的锁模力建立时间、模块化设备理念以及高效节能的高性能挤出机。贝克姆代表着精密的工程解决方案、极高的生产可靠性和优质包装设备的高端制造。专为敏感市场和工业市场的特定要求量身定制。

通过参加德国杜塞尔多夫包装展览会、中国国际橡塑展和沙特橡塑展，贝克姆展示了不仅是成为设备制造商，更要成为全球高端包装市场长期技术伙伴的壮志雄心！

Pharma & Healthcare – Cleanroom-Compatible Packaging Solutions: In the pharmaceutical sector, the highest standards apply in terms of particle control and repeatability full documentation of production processes:

- Consistent wall thickness distribution and dimensional accuracy
- Documentation of production processes
- Validatable process parameters

Bekum machine concepts are designed for operation in controlled production environments up to cleanroom conditions. Electromechanical axes ensure precise, reproducible motion sequences and stable cycle times.

Both monolayer and multilayer technologies enable defined barrier properties – for example in packaging for liquid pharmaceuticals, diagnostic solutions or disinfectants.

The combination of homogeneous melt preparation,

precision extrusion head technology and process-stable machine control ensures consistently high packaging quality – a fundamental requirement in regulated markets.

PET Handle Bottles – Performance for Consumer and Household Markets: As a technology leader for demanding PET extrusion blow moulding applications, Bekum presents crystal-clear handle bottles manufactured from 100% recyclable PET. In this segment, transparency, ergonomics and design flexibility are key performance factors. Typical applications include:

- Food-related applications
- Household cleaners
- Laundry and home care products

The flexible extrusion configuration of Bekum machines enables processing of both PET and HDPE without mechanical conversion – ideal for manufacturing handle containers in either PET or HDPE.

Industrial Packaging – High-Purity and Hazardous-Goods Applications: In the field of industrial packaging, Bekum covers a broad portfolio – from jerrycans and drums to IBC components. Specific requirements arise in applications involving chemicals and hazardous goods, specialty additives and media, as well as high-purity applications, for example in the semiconductor industry.

In semiconductor environments, ultra-pure process chemicals are used that do not tolerate contamination from packaging materials. Critical factors include high-purity raw materials, precisely defined multilayer structures, excellent surface quality and dimensional stability in large-volume containers. Multilayer technologies with integrated barrier layers provide permeation resistance, reduce emissions and enhance safety during storage and transportation. Bekum machines are engineered for the production of large-volume packaging with high weight consistency, precise clamping force control and uniform wall thickness distribution – essential criteria for UN-certified packaging systems.

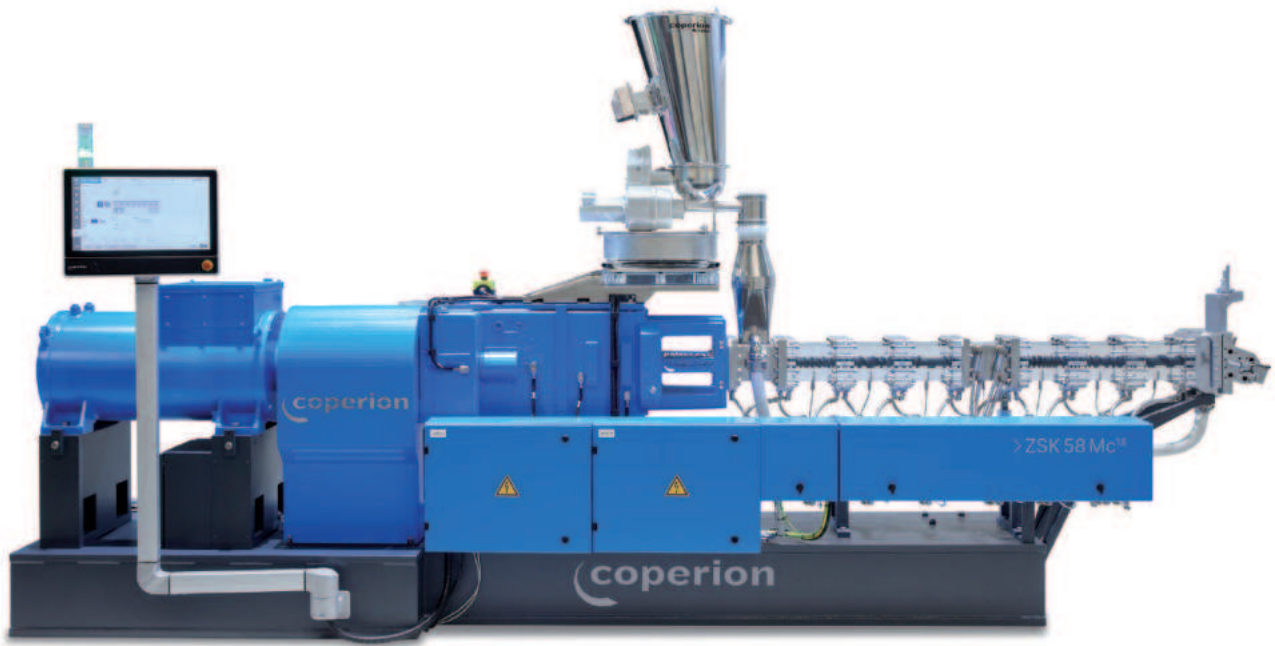
Technology as the Basis for Market Success: Performance in these markets is based on spiral mandrel extrusion heads for optimal melt homogeneity, precise electromechanical drive systems, short clamping force build-up times, modular machine concepts and energy-efficient high-performance extruders.

Bekum stands for precise engineering solutions, high production reliability and premium-quality machines that manufacture first-class packaging – tailored to the specific requirements of sensitive and industrial markets.

With its participation at interpack, Chinaplas and Saudi Plastics & Petrochem, Bekum underlines its ambition not only to be a machine manufacturer, but a long-term technology partner for demanding packaging segments worldwide.

► Bekum Maschinenfabriken GmbH
Kitzingstr. 15/19, 12277 Berlin, Germany
www.bekum.com
CHINAPLAS 2026: Stand 2.1G45

高效的塑料加工和回收技术 Technologies for Plastics Processing and Recycling Ensure Greatest Efficiency



在2.1号馆F98展位上，ZSK 58 Mc¹⁸将通过其透明的加工段，向参观者展示双螺杆挤出机的混合和分散性能。
(照片：科倍隆德国，斯图加特)

With its transparent process section, the ZSK 58 Mc¹⁸ at Booth 2.1F98 in Hall 2.1 provides exciting insights into a twin screw extruder's mixing and dispersion behavior
(All photos: Coperion, Stuttgart Germany)

2026年3月，斯图加特讯——在今年的中国国际橡塑展Chinaplas上，科倍隆将在2.1号馆F98展位展示其在塑料加工和回收领域的全面技术与工程专业知识。凭借旗下Herbold Meckesheim、科倍隆楷创以及卡尔麦品牌，科倍隆为两个应用领域提供单一来源的系统组件以及成套系统解决方案。

At Chinaplas 2026 Coperion will exhibit its comprehensive technological and engineering expertise in plastics processing and recycling at Booth 2.1F98 in Hall 2.1. With its brands Herbold Meckesheim, Coperion K-Tron and Colormax, Coperion provides both individual system components as well as complete line solutions from a single source for both application areas.

在此次展会上，科倍隆将展示两款高效双螺杆挤出机的代表产品：一台ZSK 58 Mc¹⁸和一台STS 25 Mc¹¹。同时展出的还有科倍隆楷创K-ML-SFS-KT20双螺杆喂料机，科倍隆楷创K-ML-D5-KT35双螺杆喂料机搭配一台用于补料的2415真空上料机，科倍隆楷创K-ML-D5-KS60单螺杆喂料机以及来自卡尔麦系统的C/S-LW-NT38双螺杆喂料机。此外，还将展示一台CVH 550高压旋转阀和一台WEK 265双通换向阀，这两款都非常适用于粒料。

配混：实现高性能的可靠技术

科倍隆是紧密啮合、同向旋转双螺杆挤出机发展领域的先驱。科倍隆在此次Chinaplas上展出的ZSK 58 Mc¹⁸具有18 Nm/cm³的比扭矩，在能耗较低的同时产量高达2,500 kg/h。挤出机的透明工艺段让大家可以清晰直观地观察其混合与分散的过程。该挤出机非常经久耐用，其设备开机率和OEE（设备综合效率）都非常高。ZSK 58 Mc¹⁸将与科倍隆楷创高精度双螺杆喂料机K2-ML-D5-T35一同展出，该喂料机配

备了ActiFlow™智能物料振动流化器，用于物料的柔和处理。

此外，STS挤出机系列的最小机型STS 25 Mc¹¹实验用挤出机也将一同展出。它采用密闭式设计，尽可能减少裸露的表面以易于清洁，对用户操作非常友好。它的生产参数能可靠应用到其他STS机型上，使其成为配方研发的理想系统。STS 25 Mc¹¹将搭配科倍隆楷创K-ML-SFS-KT20双螺杆喂料机一同展出。

STS 96 现已推出 STS Mc PLUS 配置版本，其最大比扭矩 (M_d/a³) 可达 13.6 Nm/cm³，可在所有应用中实现最高 20% 的产能提升。此外，加工段填充率的提高与共混过程中剪切应力的降低，进一步提升了产品质量。

除了ZSK和STS系列外，科倍隆还提供专为亚洲和其他一些新兴市场设计的CTE双螺杆挤出机。

塑料回收：以优异的性价比提供灵活的解决方案

同时，科倍隆和Herbold Meckesheim还将共同展示在塑料回收技术和工艺解决方案方面丰富的专业知识。自合并以来，两家公司不断进行深入研究，优化调整其技术，使得整个生产线在运行中表现出极高的效率。在这次的国际橡塑展上，科倍隆和Herbold Meckesheim将展示一条虚拟回收生产线。参观者有机会看到回收系统的内部核心部件，并亲眼看到每个加工步骤的工艺技术细节和高效的部件。

此外，科倍隆将在2026年中国国际橡塑展上推出其用于PET回收的新型创新系统。这套用于生产PET再生料的标准化解决方案，处理能力从500 kg/h到10 t/h，确保以优异的性价比实现极高的产品质量。这套系统具有灵活的可调节性，可用于瓶到瓶、瓶到片材、瓶到纤维以及托盘回收等应用。通过与固相增粘 (SSP) 反应器相结合使用，该回收系统生产的产品可以满足欧洲食品安全局 (EFSA) 或美国食品药品监督管理局 (FDA) 对PET再生料用于食品直接接触使用。

喂料和输送：精准投料，恰到好处

科倍隆为整个行业提供了多样化的喂料解决方案——从螺杆输送机、振动喂料机、粉体泵、皮带称、液体喂料机到流量计等一应俱全。所有喂料设备均可提供多种配置，并可根



具体应用灵活组合。将于Chinaplas 2026上重点展示适用于自由流动粒料和粉末的单螺杆喂料机，以及适用于粉末和流动性差添加剂的双螺杆喂料机。

同时展出的还有ActiFlow™智能助流装置。该装置无任何与物料接触的运动部件，可有效防止失重式喂料机中流动性差物料的架桥现象，确保喂料稳定可靠。

科倍隆还提供一系列成熟可靠的真空顺序输送解决方案，包括最新一代2400系列真空上料机。2400系列真空上料机可高效输送自由流动的干粉物料，适用于料斗加料或为失重式喂料机回填等场景。

全方位服务：提供现场支持，实现设备优异的运行效率

科倍隆以确保其技术在整个生命周期内保持高性能、降低停机风险和长期保持工艺效率为目标。得益于全球经验丰富的工艺和研发工程师网络，科倍隆的服务线覆盖全球，能够快速实现服务干预，使客户能够受益于公司对特定地理位置情况的深入了解。

At Chinaplas 2026, Coperion will show two representatives of its high-efficiency twin screw extruders, a ZSK 58 Mc¹⁸ and an STS 25 Mc¹¹. Additional exhibits at the booth will include Coperion K-Tron's K-ML-SFS-KT20 twin screw feeder, a Coperion K-Tron K-ML-D5-KT35 twin screw feeder with a 2415 vacuum receiver for refilling ingredients, a K-ML-D5-KS60 single screw feeder and a C/S-LW-NT38 twin screw feeder from Colormax Systems. Moreover, the CVH 550 high pressure rotary valve as well as the WEK 265 two-way diverter valve, both suited for granulates, will be available to view.

Compounding: Reliable technologies for the highest performance

Coperion is a pioneer in the development of closely intermeshing, co-rotating twin screw extruders. For the first time at Chinaplas, Coperion will show a running ZSK 58 Mc¹⁸ with a specific torque of 18 Nm/cm³. The transparent process section of the extruder provides exciting insights into its mixing and dispersing behavior. The twin screw extruder achieves throughputs of up to 2,500 kg/h with concurrent low energy consumption. It is very robust and reliable, and both the machine's availability and its OEE (overall equipment effectiveness) value are extremely high. The ZSK 58 Mc¹⁸ will be exhibited together with a high-accuracy Coperion K-Tron K2-ML-D5-T35 twin screw feeder equipped with ActiFlow™ bulk material flow activator for gentle product handling.

Furthermore, an STS 25 Mc¹¹ laboratory extruder, the smallest in the STS extruder series, will be on display. It has

高精度的科倍隆楷创 (Coperion K-Tron) K-ML-D5-KT35喂料机配备了 ActiFlow™ 智能助流装置，可温和处理物料，非常适合用于稳定、可靠地添加各类添加剂。

(照片：科倍隆德国，斯图加特)

The high-accuracy Coperion K-Tron K-ML-D5-KT35 feeder is equipped with ActiFlow™ bulk solid activation which handles product gently – suitable for reliably introducing additives

closed, easy-to-clean surfaces and it is extremely user friendly. Its production parameters can be reliably transferred to other STS sizes, making it the ideal system for recipe development. The STS 25 Mc¹¹ will be exhibited with a Coperion K-Tron K-ML-SFS-KT20 twin screw feeder.

The STS 96 is now available in the STS Mc PLUS configuration, featuring a maximum specific Md/a³ torque of 13.6 Nm/cm³. This enhancement enables up to 20% higher throughput across all applications. Additionally, the increased fill level within the process section and reduced shear stress during compounding contribute to improved product quality.

Along with the ZSK and STS series, Coperion offers CTE twin screw extruders that are designed especially for the Asian and other emerging markets.

Plastics Recycling: Flexible solutions at an attractive price-to-performance ratio

Together, Coperion and Herbold Meckesheim will present the broad expertise in technology and process solutions for plastics recycling. Since their merger, both companies have continued to intensively develop and optimally attune their technologies so that entire lines excel in operation with extremely high efficiency. Coperion and Herbold Meckesheim will exhibit a virtual recycling line at Chinaplas. Visitors to Booth 2.1F98 in Hall 2.1 can peer inside key components of the recycling installation and see for themselves the process-engineering competence in each process step and the high efficiency of each component.

In addition, Coperion will introduce its new, innovative system for PET recycling at Chinaplas 2026. This standardized solution for manufacturing PET recomponds in a throughput range of 500 kg/h up to 10 t/h ensures extremely high product quality at an attractive price-to-performance ratio. The system can be flexibly modified; it can be used for bottle-to-bottle, bottle-to-sheet, bottle-to-fiber and tray recycling applications. For EFSA or FDA approval for direct contact of the PET recomponds with food, the recycling system can be combined with an SSP (solid state polycondensation) reactor.

Feeding and conveying: The right amount of ingredients at the right time

Coperion offers the largest selection of feeding solutions in the entire industry. From screw conveyers to vibratory feeders, bulk solids pumps, weigh belt feeders and liquid feeders up to flow meter devices – every feeder is available in a variety of configurations and can be combined for any application. At Chinaplas 2026, single screw feeders for free-flowing granulates and powders as well as twin screw feeders for powders and poorly flowing additives will be on display.

Moreover, the ActiFlow™ smart bulk solid activator will be available to view. ActiFlow is a solution with no product-contact parts that reliably hinders bridging of poorly flowing materials in loss-in-weight feeders, ensuring reliable feeding.

Coperion also offers a broad palette of proven, reliable vacuum sequencing solutions with the most up-to-date vacuum conveyors and receivers, including the 2400 Series. The 2400 Series vacuum receiver allows conveying of free-flowing, dry bulk materials at high capacity for filling hoppers or backfilling loss-in-weight feeders, for example.

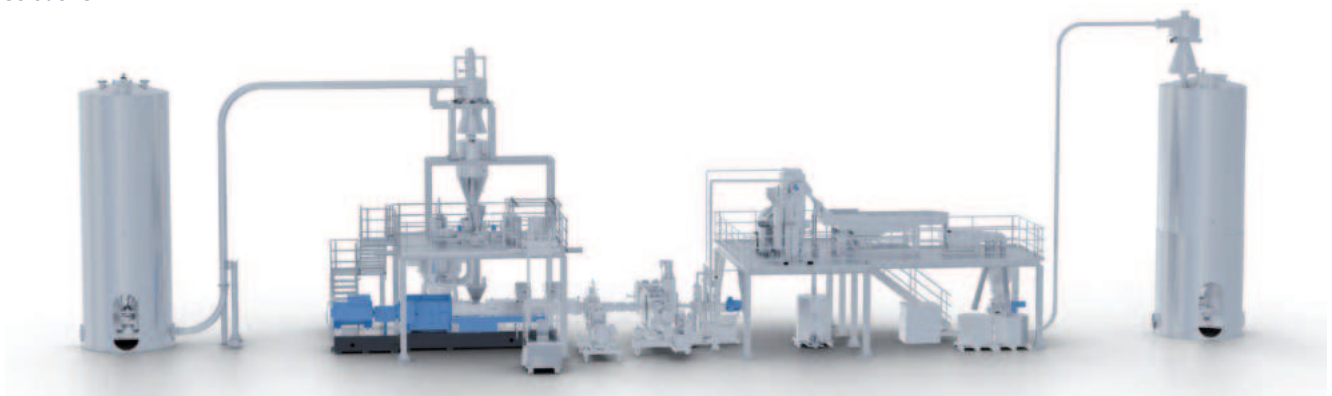
Comprehensive services: On-site support for maximum machine availability

Coperion pursues the goal of ensuring its technologies' high performance availability throughout their entire life cycles, reducing downtime risk, and keeping processes' efficiency high over the long term. Thanks to a global network of experienced process and development engineers, Coperion services lines installed worldwide, with the ability to realize service interventions quickly, enabling the customer to profit from the company's knowledge of location-specific conditions.

► Coperion GmbH
Theodorstr. 10, 70469 Stuttgart/Germany
www.coperion.com
CHINAPLAS 2026: Stand 2.1F98

使用科倍隆新PET回收解决方案，可以以优异的性价比生产出高质量的PET再生料。（照片：科倍隆德国，斯图加特）

High-quality PET recomponds can be manufactured at an attractive price-to-performance ratio using Coperion's new PET recycling solutions



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康甫机械（上海）有限公司
上海市嘉定区叶城路565号隆慧大厦17楼1701-1702室
电话 +86 21 5951 8030 · 移动电话 +86 150 2119 3570
sales@kampf-cn.com

Kampf Machinery (Shanghai) Co., Ltd.
Room 1701-1702, 17th Floor · Longhui Building
No. 565 Yecheng Road · Jiading District, Shanghai
fon +86 150 2119 3570 · sales@kampf-cn.com