

Plastics Recycling WORLD



FILM RECYCLING: INNOVATING FOR PPWR

PELLETISER PROGRESS ON SHOW AT K2025

HEALTHCARE: PVC AND POLYOLEFIN RECYCLING

AMI | Events

Chemical Recycling

March 10-11, 2026 | Houston, TX, USA

Capitalizing on the opportunities for chemical recycling in
North America

Hear from industry leading speakers, including:



Olivia Poole
AMI



Rob Kennedy
Aeternal Upcycling



Valerio Coppini
Alterra Energy



Chris Faulkner
Agilyx



Brad Price
New Energy Risk



Jan Henke
ISCC PLUS



Why attend?



Discover cutting-edge
advancements in
Chemical Recycling



Network with leading
experts and innovators
in the industry



Learn actionable
strategies for a
sustainable future

BOOK YOUR PLACE TODAY

Sponsored by:



Plastics Recycling WORLD

4 News

The latest news from the global plastics recycling sector, including: Volkswagen invests in circularity at Zwickau site; FFRA Impact Report shows progress in US film; Stadler upgrades sorting facility in Spain.



PAGE 4

13 Helping film recyclers respond to PPWR

EU regulation is bearing down on the packaging industry in its move to circularity, leading to a surge in innovation for recycling film and flexible packaging. By David Eldridge

PAGE 13



21 Pelletiser progress on show at K2025

Developers of pelletising systems for resin, compound and recydate producers displayed their innovations at the K Show last October. By Chris Saunders

PAGE 21



29 Medical matters: PVC and polyolefins recycling

Developments in recycling medical devices and packaging include creation of the VinylPlus Healthcare platform, and partnerships with hospitals. By David Eldridge

PAGE 29



38 Diary

COMING NEXT ISSUE

➤ PET Recycling ➤ Melt Filtration Technology ➤ Biopolymer Recycling

CONTACT US

CLICK HERE TO MAKE SURE YOU GET YOUR COPY

AMI

Ground Floor, One Brunswick Square,
Bristol, BS2 8PE, United Kingdom
Tel: +44 (0)117 924 9442
www.amiplastics.com

www.twitter.com/plasticsworld
Registered in England No: 2140318

DOWNLOAD MEDIA DATA

EDITORIAL

Editor-in-Chief: David Eldridge
david.eldridge@amiplastics.com

Senior Staff Writer: Chris Saunders
chris.saunders@amiplastics.com

Contributing Editor: Jennifer Markarian
jma@amiplastics.com

Events and Magazines Director: Andy Beevers
andy.beevers@amiplastics.com

ADVERTISING

Advertisement Manager: Claire Bishop
claire.bishop@amiplastics.com T/ +44 (0)7905 848744

Advertising Sales (China/Hong Kong): Maggie Liu
maggie.liu@ringiertrade.com T/ +86 13602785446

Advertising Sales (Taiwan): Ms Sydney Lai
sydneylai@ringier.com.hk T/ +886-913625628

Advertising and Expo Sales (India): Yogesh Vyas
yogesh@exhibetter.com T/ +91 9920735930

© Copyright Applied Market Information. No part may be reproduced without the prior written permission of the publisher.

Volkswagen invests in circularity at Zwickau

Volkswagen is to invest €90m in automotive recycling at its Zwickau site in Germany, implementing various technical innovations and the use of AI with a gradual increase in capacity to 15,000 vehicles planned by 2030.

The Volkswagen Group's circular economy strategy follows the 'reduce and grow' principle of cutting the use of primary raw materials and emissions while establishing value creation, resilience, and innovation, with new business models such as recycling, refurbishment, and second-life applications opening up additional revenue potential.

"The circular economy will become increasingly important for Volkswagen in the coming years," said Andreas Walingen, Head of



Representatives from management and staff with State Minister for Economic Affairs Dirk Panter (third from right) at the announcement in Zwickau, Saxony, Germany

Group Circular Economy. "Specifically, we are pursuing the goal of reusing raw materials for the construction of new vehicles. This will make Volkswagen less dependent on the global raw materials trade, reduce the CO₂ footprint of its vehicles, and create new business models."

By using data platforms and AI, Volkswagen can efficiently track and control material flows, recycling processes, and business models. In addition, the Zwickau site, the company's first to switch completely to e-mobility, is to play a central role in training.

➤ www.volkswagen-group.com

BASF assesses options for TrinamiX

BASF says it is examining strategic options for its TrinamiX subsidiary, which develops solutions based on biometric imaging and material analysis such as

mobile NIR spectroscopy. These activities do not form part of the core business on which BASF intends to focus as it implements a new strategy.

TrinamiX employs around 200 people worldwide and holds more than 800 patents and patent applications.

➤ www.basf.com

➤ <https://trinamixsensing.com>

Erema India launch

Erema and Lindner Washtech have announced the opening of their subsidiary Erema India, which will facilitate faster access to high-end technology and a full range of mechanical recycling and local support for Indian companies.

"The Indian market is developing at an impressive pace," says Christoph Wöss, Global Sales Director at Erema.

He said that over the past two years, Erema has seen in bottle-to-bottle recycling how quickly implementation progresses once the regulatory framework is set.

Erema India consolidates Erema's extrusion and Lindner Washtech's washing technologies under one roof and provides Indian recyclers with access to European washing, extrusion, and thermal decontamination technology. The new subsidiary operates at two locations; Vadodra, Gujarat, and Mumbai.

➤ www.erima.com

➤ www.lindner-washtech.com

CMG expands its Italian headquarters

CMG Granulators has announced an expansion of its production headquarters in Budrio, Italy with a new 800 m² area dedicated to the logistics department. The strategic investment will allow CMG to further improve organisation, production capacity, and delivery times.

"This expansion is a concrete response to the trust the market continues to place in us," says Giorgio Santella, CEO of CMG. The company's growth has enabled it to invest in space, processes, and expertise, to support customers with effective solutions and a high-level service, he said.

Alongside the production area, the facility also hosts a new 1,000 m² Technical Centre which features a test area equipped with granulators and shredders of various sizes and capacities, as well as a training area with dedicated rooms and infrastructure.

➤ www.cmg-granulators.com



INTERNATIONAL EXHIBITION FOR
PLASTICS AND RUBBER INDUSTRIES

9 - 12 JUNE 2026
FIERAMILANO RHO - MILAN - ITALY

plastonline.org



WHERE IDEAS
TAKE SHAPE

IN BRIEF...

Carbios has reaffirmed its intention to construct a new plant at Longlaville, France, citing multiple commercial agreements as confirmation of high demand for biorecycled material, but it has postponed the timeline by three months.

www.carbios.com

Nextchem, through its subsidiary MyRemono, has been awarded a site-specific feasibility study for a plant to chemically recycle PMMA at Röhm's production site in Worms, Germany.

www.nextchem.com

According to a US WARN notice, **Phoenix Technologies** permanently closed its PET recycling facility in Bowling Green, Ohio, on 20 November 2025.

The **European PET Bottle Platform** has begun an industry-wide consultation to collect stakeholder feedback on the recently developed Design for Circularity guidelines for PET bottles.

www.epbp.org

New measures to support plastics recycling in EU

The European Commission has unveiled a first set of pilot actions designed to accelerate Europe's transition to a circular economy. It said that by optimising the recycling of plastics, these measures will further unlock the potential of the Single Market and enhance the EU's economic security, strategic autonomy, competitiveness, and environmental sustainability.

As part of the package, the Commission is presenting an implementing act to create EU-wide end-of-waste criteria for plastics under the Waste Framework Directive. The Commission is also presenting for vote by Member States an

implementing act concerning the recycled content of PET single-use plastic beverage bottles under the Single-Use Plastics Directive and plans to relaunch and strengthen the Circular Plastics Alliance.

To ensure fair competition between EU-made and imported plastics, the Commission is creating separate customs codes for virgin and recycled plastics and announcing monitoring efforts for EU and global markets for virgin and recycled plastics, which will inform potential trade measures.

Although this is seen as an improvement, some industry insiders think more can be

done. "To deliver circularity at scale, the measures proposed are a first step and/or require legal clarity to create the conditions needed on the ground for impact, innovation and investment along the entire plastics eco-system," said Virginia Janssens, Managing Director, Plastics Europe. "Other measures will need to follow. Europe needs decisive, coordinated and comprehensive political and policy action now to unlock investment in circularity and innovation which is inter-linked with the need to reinforce the EU's industrial base and economic security."

➤ <https://commission.europa.eu>

➤ <https://plasticseurope.org>

Aduro chooses Chemelot site

Chemical recycler Aduro has selected Chemelot Industrial Park, in Sittard-Geleen, Netherlands, as the location for its First-of-a-Kind (FOAK) industrial plant deploying Aduro's Hydro-

chemolytic Technology.

The plant represents the next phase of Aduro's progression toward commercial operation, with the facility supporting successive phases of scale-up and

optimisation. Selection of the site reflected Chemelot's ability to support permanent industrial operations and future expansion, said Aduro.

➤ <https://adurocleantech.com>

K2025 reusable cup trial deemed a success

A reusable cup system was implemented at Messe Düsseldorf during K2025 involving 50,000 durable, lightweight reusable cups made from Borealis' foamable PP, produced using OMV's ReOil technology from chemically recycled feedstock.

"Introducing a cup return system across an event as large and complex as K 2025 was a major step for us," says Thomas Franken, Director of

K, Messe Düsseldorf. "It showed that visitors are ready to engage with circular solutions, and that large-scale reuse can work in practice."

A dedicated collection and cleaning system, including around 50 collection bins, was set up to enable the cups to be washed and returned to use within hours.

➤ www.k-online.com

➤ www.borealisgroup.com



IMAGE: BOREALIS

meet us!

**Plastics Recycling
Conference**

USA 2026

San Diego, CA/USA

Feb 23-25, 2026

Booth #918

PET Washing lines – Value-added plastics recycling

With decades of experience as a specialist for modular system solutions, Herbold Meckesheim supplies automated PET washing lines with high energy efficiency, easy maintenance and excellent end products. Through the merger with Coperion, customers now have access to the entire plastics recycling process chain from a single source.

www.herbold.com | www.coperion.com

Purity²



FFRA report shows progress in US film

The Flexible Film Recycling Alliance (FFRA), funded by Plastics Industry Association in the US, has released its first Impact Report, outlining the group's collaborative progress towards scaling flexible film collection and recycling systems across the US.

The report details how the organisation is working across the value chain to accelerate recycling rates, expand access to film recycling, and improve consumer education to lay the groundwork for a truly circular solution for flexible films.

"FFRA's first Impact Report shows what's possible when manufacturers, retailers, recyclers, and policymakers work together toward a shared goal," said



Zip bags are among the items consumers can get recycling guidance about from FFRA

Patrick Krieger, Senior Vice President of Sustainability & Policy, at the association. "In 2025, FFRA made meaningful headway from expanding access to film recycling nationwide to shaping policy outcomes that better reflect how recycling systems actually work. This progress reinforces that collaboration, data, and

practical solutions are the path forward."

Highlights covered in the report include the launch and rapid growth of the Plastic Film Recycling Directory, targeted advocacy efforts in California, and prioritisation of a robust verification framework to boost confidence.

➤ <https://ffra.org>

Project targets PA nets

UBE, Ziknes, the University of Valencia, and Aimplas, are collaborating on the Redes4Value project which aims to transform recycled PA fishing nets into industrial applications. Mechanical and chemical recycling processes are being used with reactive extrusion technologies.

"We are achieving optimised conditions for depolymerising fishing nets and recovering monomers with purities above 95% in some laboratory-scale streams, and over 80% at pilot scale," said Nairim Torrealba, Aimplas chemical recycling researcher. "This will allow us to repolymerise and obtain new polyamides with quality equivalent to virgin material."

The Redes4Value project is advancing processes such as hydrothermal depolymerisation, ionic liquid-assisted solvolysis, and reactive extrusion.

➤ <https://aimplas.net>

Invista and Epoch in PA recycling deal

Polyamide producer Invista and Epoch Biodesign, a UK-based enzymatic recycling technology specialist, have signed a Memorandum of Under-

standing (MoU) aimed at advancing the development of post-consumer recycled PA 66.

The collaboration will combine Epoch's AI-engi-

neered recycling enzymes with Invista's polymerisation expertise and global footprint.

➤ www.invista.com

➤ www.epochbiodesign.com

PRE maps plastics recycling technologies in Europe

Plastics Recyclers Europe (PRE) has launched the first comprehensive mapping of plastics recycling technologies across Europe. It said this provides an evidence-driven overview of the current state of European plastic recycling and outlining both existing capabilities and critical gaps.

"This compendium shows how far

we have come in our technological developments, but also where further innovation and investments are needed to keep Europe at the forefront of the transition to plastics circularity," said Ton Emans, President of PRE.

The report examines mechanical, dissolution, and chemical recycling across key waste streams, including

packaging, electrical and electronic equipment, end-of-life vehicles, and construction.

Findings show that mechanical recycling remains the most established and widely applied technology across Europe. Dissolution recycling is emerging as an industrial practice.

➤ <https://plastics-recyclers-europe.prezly.com>

**3rd Plastics and Fiber Recycling
Technology and Raw Materials Fair**

March 26 - 28, 2026

www.replasteurasia.com

**Türkiye's First and Sole
Plastics Recycling Fair**

For Detailed Information



**TÜYAP FAIR AND CONGRESSCENTER | İSTANBUL
TÜRKİYE**

   [replasteurasia](https://www.replasteurasia.com)

UpSolv scales up rPS plant

Canadian dissolution technology company UpSolv, formerly known as Polystyvert, has launched its high-quality, price-competitive, recycled polystyrene (rPS) at commercial scale with a first plant in the Eastern Townships, which will treat 11,000 tonnes/yr.

The company's latest trials showed excellent results on EPS and XPS as well as on rigid PS applications, further validating performance, consistency, and processability.

"In today's market, sustainability and performance can no longer be treated as trade-offs," said Nathalie Morin, UpSolv's CEO. "Circularity only works when recycled materials deliver the same reliability. At UpSolv, our team has made that a reality."

UpSolv said its low-energy dissolution and purification technology removes contaminants and offers a high quality recycled resin, which can be used as a drop-in for new products. The rPS is engineered for high-stress and performance end uses, including protective helmets, surfboards, packaging, and insulation.

UpSolv is inviting partners to secure off-take agreements. The technology is protected by more than 40 patents in 17 countries.

➤ www.upsolv.ca

Stadler upgrades ageing sorting facility in Spain

German technology group Stadler has modernised and upgraded Bizkaiko Zabor Berziklategia's (BZB) lightweight packaging sorting facility in Bizkaia, the first turnkey facility it built in Spain more than 20 years ago.

The upgrade represents a major leap forward in capacity, automation, and digitalisation, enabling BZB to significantly increase throughput, improve material purity, and future-proof operations in line with evolving regulatory and market demands.

BZB is a public-private partnership involving Garbiker and Trienekens País Vasco which specialises in the collection, sorting, and processing of packaging waste.

"The modernisation of our plant is transformative for BZB," says Pedro



IMAGE: STADLER

BZB's lightweight packaging sorting facility in Bizkaia

Goicoechea, General Manager Basque Country at BZB Amorebieta.

"It allows us to increase efficiency and recover more materials, while positioning us to meet future challenges and sustainability goals," he said.

The decision to modernise the plant rather than relocate it reflects BZB's commitment to maximising

the use of existing infrastructure while adopting the most advanced sorting technologies available, said Stadler in its announcement. Designed to handle a wide range of light packaging waste, the facility produces high-quality fractions including PET, HDPE, PP, PS, and two film qualities.

➤ <https://stadler-engineering.com>

➤ <https://bzb.es>

New Swiss approach to plastics

Switzerland is overhauling its plastic recycling system with the launch of a nationwide initiative utilising a user-friendly approach spearheaded by Recypac.

The system works by encouraging consumers to purchase and use specially designed collection bags, known as Recybags, which can be used to collect packaging and drinks cartons and then returned to participating retailers or designated municipal

collection points. The collected plastic is currently processed in neighbouring countries while plans are being made to integrate the recycled materials back into Swiss production.

The program aims to achieve a 55% recycling rate for plastic packaging and 70% for beverage cartons by 2030, these goals aligning with Switzerland's broader environmental objectives and demonstrating the country's commit-

ment to reducing plastic waste and promoting circular economy principles.

The system is designed to handle various types of packaging, from yogurt pots to shampoo bottles, significantly expanding the scope of recyclable materials. The initiative has already been rolled out in five municipalities and is set for expansion across the country in the coming weeks and months.

➤ www.recypac.ch

RACETM

RECYCLING AND COMPOUNDING EXPO

LIMITED SPOTS
AVAILABLE TO:
EXHIBIT
SPEAK
PARTNER
VISIT

2026 | **May 06 07 08**
HALL 4, BEC, NESCO,
Mumbai, India

ENQUIRE NOW AT
RACEEXPOS.COM

THE GLOBAL STAGE FOR INNOVATION & COLLABORATION IN
RECYCLING AND COMPOUNDING

SECURE YOUR SPOT NOW!



7,500+
INDUSTRY VISITORS
OVER THREE DAYS

150+
LEADING
EXHIBITORS



2x
LARGER
FLOORSPACE



75+
EXPERT
SPEAKERS



30+
COUNTRIES
PARTICIPATING



BROUGHT TO YOU BY:

POLYMERUPDATE
INTELLIGENCE ANALYTICS CONFERENCES

KNOWLEDGE PARTNER:
(Harit Bharat – School Action Zone)



PROUDLY SUPPORTED BY:



ENVIRONMENT PARTNER:



MEDIA PARTNERS:

Plastics Recycling
WORLD

Compounding
WORLD



ASSOCIATION PARTNERS:



MATERIAL RECYCLING ASSOCIATION OF INDIA
Voice of the Indian Recycling Industry

INDIAN PLASTICS INSTITUTE



AMI COMPOUNDING & RECYCLING EXPO

23-24 September 2026 • Messe Frankfurt

EXHIBIT AT EUROPE'S PREMIER EXPO FOR POLYMER PERFORMANCE AND CIRCULARITY

BOOK YOUR BOOTH >

WHY EXHIBIT?



Generate high-quality leads
from professionals actively
sourcing your solutions



Raise your brand profile
among key decision makers
in your target market



Showcase your latest
technologies, materials
or machinery to highly-
targeted audiences



Benefit from promotional
campaigns across
AMI's five global plastics
industry magazines



Reconnect with
existing customers
face-to-face



Generate qualified
leads to grow your
sales pipeline



compoundingrecyclingexpo.com

EU regulation is bearing down on the packaging industry in its move to circularity, leading to a surge in innovation for recycling film and flexible packaging. By David Eldridge



Helping film recyclers in Europe respond to PPWR

The clock is ticking in the implementation of the EU's Packaging and Packaging Waste Regulation (PPWR). Following a transition period, the first phase of enforcement starting in August this year includes recyclable design of plastic packaging among its requirements. The first deadline for mandatory recycled content targets is 2030, which will come quickly for recyclers of plastic film and flexible packaging currently working to gear up their operations commercially, logistically and technically.

Quality requirements for recyclate used in plastic packaging will rise significantly because of PPWR, said Leistriz and NGR when announcing a technology partnership last year to help recyclers meet PPWR's demands. "From mandatory recycled content and extended producer responsibility to material restrictions, the entire plastics value chain will be affected. Recycling must become more efficient, precise, and sustainable - this is precisely where the cooperation between NGR and Leistriz comes in," said the companies (see

below for more on this partnership).

Recycling technology suppliers are co-operating closely with film and flexible packaging recyclers, developing lines and equipment to increase production, improve product quality and optimise operations. Innovations deal with challenges that are particular to film recycling, such as the low density of input material which causes problems in feeding to the extruder. Many technology groups demonstrated their innovations in film recycling at K2025 in Dusseldorf, Germany in October.

Starlinger Recycling Technology used the K Show as the launchpad for its new RecoStar Dynamic Art recycling system designed for post-consumer film recycling. The new system is said to be particularly suitable for heavily contaminated post-consumer plastic waste that has a high moisture content due to storage or after washing, and produces high-quality regranulate that can be used in demanding applications.

Paul Niedl, Commercial Head, said: "We have

IMAGE: EREMA



On the Erema stand at K2025, Markus Huber-Lindinger, Managing Director, and Sophie Pachner, R&D Manager Process Engineering, stand in front of an Intarema 1108 TVEplus equipped with the new Volex degassing technology and EcoGentle plasticising technology

technically optimised the components of our new RecoStar Dynamic Art recycling systems in such a way that production output and system efficiency have increased significantly."

Special features of the new system include its spin-feed technology. Starlinger said: "Technically sophisticated design elements such as the newly conceived ribs in the Smartfeeder, where the input material is prepared for extrusion, and the special geometry of the cone bushing and the feed zone of the extruder ensure that the material is held longer and enters the extruder with more pressure and spin. This so-called 'spin feed' leads to a significant increase in system performance."

Automated speed

A Dynamic Automation Package helps towards production efficiency by detecting fluctuations in the input material due to differences in bulk density, size, or moisture content, and regulates the extruder speed accordingly. It also responds to interruptions in the material feed by automatically putting the system into standby mode and restarting it when production resumes.

Along with the RecoStar Dynamic Art on its stand, Starlinger showed a new underwater pelletising unit. Integrated into the highly automated production process, this works particularly efficiently at high throughput rates and allows the processing of a wide variety of input materials, said the company.

A number of exhibits on the **Erema** stand at K2025 showed how the company is innovating in the interests of film recyclers, in both the post-consumer and post-industrial areas. The group launched a twin-screw extruder system designed for low bulk density film recycling. The TwinPro

system connects Erema's Preconditioning Unit (PCU) featuring its patented Counter Current technology directly to a twin-screw extruder for the first time.

The launch comes after two years of researching, testing and developing the twin-screw extruder concept, in which Erema worked closely with customers. The company said the resulting system is "particularly adept" at recycling multilayer film production waste but also has good potential for improving recycling of thin-walled post-consumer regrind material.

Markus Huber-Lindinger, Managing Director at Erema, claimed the TwinPro system "sets new standards for specific recycling tasks. During development, we focused especially on combining our strengths in material processing with the advantages of a twin-screw extruder."

Multilayer film

In the recycling of multilayer film consisting of PE-PA or PE-EVOH, the TwinPro displays highly efficient homogenisation, according to the company. The first stage of homogenisation takes place in the PCU, which shreds, heats, dries, compacts and buffers the input material. Erema said: "Optimised material preparation right at the start of the recycling process lays the foundation for consistently high-quality end products."

The extruder is continuously filled with heated and pre-compacted material from the PCU, which can treat a wide range of materials with bulk densities from 30 to 800 g/litre without the need for separate agglomeration, weighing or a stuffing unit. The intensive homogenisation that then takes place in the twin-screw extruder is essential for multilayer film recycling so that the different polymer types are completely mixed. This produces recycled pellets with the improved mechanical properties needed for reuse in multilayer films.

Although it was originally developed for complex film waste, the TwinPro now opens up new capabilities for using twin-screw extruders in the recycling of thin-walled packaging, according to Erema. One particular application is low-density PP flakes that have been sorted and hot-washed from very thin-walled packaging such as yoghurt tubs. The TwinPro set-up enables smooth processing of the low-weight, high-volume material which often causes problems in the material feed on conventional twin-screw systems.

Other new products shown at K2025 that are relevant to film recycling relate to Erema's Intarema TVEplus systems based on a single-screw extruder. The group says its new Volex technology delivers

“significantly higher” degassing performance in post-consumer recycling. The technology uses water stripping to achieve up to 40% reduction in VOCs in the final pellets, compared with standard degassing with Intarema TVEplus.

Huber-Lindinger said that the Volex technology enables recyclers to enter new applications where they can use higher proportions of recycled pellets in new products, including a wide variety of film and regrind materials where high degassing performance is required. Erema sees opportunities in challenging applications such as film for transport packaging, lifestyle products, and furniture, as well as high-quality automotive interior components and robust transport solutions such as shopping baskets.

Plasticising update

Another update from Erema was the expansion of its EcoGentle plasticising technology from PET to polyolefins – HDPE, LDPE, PP – plus BOPET. In the post-consumer segment, EcoGentle enables the reliable processing of regrind material with different bulk densities and viscosities, achieved through gentle processing at lower temperatures.

For multipurpose applications, HDPE and PP, Erema said the plasticising technology lowers the temperature of the melt by up to 13° C and reduces the power consumption of the extruder drive by up to 6%. EcoGentle is also available for inhouse recycling: with LDPE/LLDPE stretch film and with BOPET film material, the temperature of the melt is as much as 20° C lower, while the extruder drive consumes up to 15% less power.

MAS has taken on the lightweight film recycling challenge in a partnership with **Siempelkamp Size**



Reduction (formerly Pallmann) which has come up with the iQonicTwin PreDensifier. The problem they identified is film recyclers processing low-density, fluffy films with air pockets, inks and adhesives, which are notoriously difficult to handle and often lead to inconsistent quality and energy inefficiencies.

MAS said: “While the conventional cutter compactor route was considered, MAS and Siempelkamp Size Reduction chose to aim higher – pursuing unmatched performance and quality. Cutter compactors can no longer meet the growing demand for top quality, as their process control cannot ensure a uniform melting process, leading to quality fluctuations in the extruder feed.”

The iQonicTwin PreDensifier combines the Pallmann predensifier technology with MAS’s conical co-rotating twin-screw extruder, leading to improved process stability, efficiency, and product

Above: The iQonicTwin PreDensifier from MAS and Siempelkamp Size Reduction tackles the problem of processing low-density, fluffy films

Alliance report offers insights into flexibles

The Alliance to End Plastic Waste has published a report – The Challenges and Solutions for Flexible Plastic Packaging Waste – which it says offers actionable insights on how to solve the issues standing in the way of creating circularity in flexible plastics.

Focusing on Europe and North America, the report from the alliance of materials producers, packaging groups and technology firms identifies five critical circularity enablers for flexible plastic:

- Improving collection and sorting to improve feedstock quality. This can be done through segregated waste

collection and secondary sorting of plastics.

- Enabling end-market demand for recycled material to drive systems viability and justify investment throughout the value chain. It suggests policy mechanisms such as EPR schemes and mandatory PCR content targets.
- De-risking investment to attract the necessary capital, through tax relief, labour and energy subsidies, and concessional loans.
- Design-for-recyclability guidelines.
- Eco-modulated EPR fees, which can accelerate the adoption of simpler

packaging design.

In Europe and North America, the Alliance is developing a Flexibles Thematic Program Market involving: mapping and system design that quantifies end-market opportunities and quality requirements; showcasing demonstration projects to build confidence in systems solutions with government, industry, and community stakeholders; enabling replication by mobilising brands, recyclers, and governments to understand what it takes to create and proliferate effective systems solutions across geographies.



Above: The X:Gran 145 combines elements of NGR's S:Gran and X:Gran technologies

quality. According to the partners, the technology significantly reduces gel formation and black spots during film recycling. There is less mechanical stress and reproducible processing means consistent product quality even with fluctuating feedstocks.

Benefits listed by the companies for the iQon-iCtwin PreDensifier include: energy efficiency of around 0.22 kWh/kg; no dust emission and no water injection; compact design and simplified maintenance; seamless integration into existing systems; and easy cleaning with faster material change.

NGR has a variety of technologies for film recycling, including the S:Gran shredder-feeder-extruder combination, with over 1,200 patented installations worldwide since continuous production began in 1997. The latest machines feature revised feeding geometry, improvements in the cutting performance, and option packages to allow the machines to be tailored for challenging materials, including films. An innovation launched by NGR at K2025 was the X:Gran 145, combining elements of its S:Gran and X:Gran technologies, under the direction of NGR's NXT:Platform allowing a high level of modularity between core component groups.

New concept

"We are very excited to bring this technology to market" said Creighton Varney, Product Manager of Post-Industrial Recycling at NGR. "It is a completely new concept, bringing all the benefits of our IP from the S:Gran, and combining it with a twin screw, mechanical feeding solution."

The sophisticated X:Gran 145 utilises a Classification Unit, comprising of two uniquely designed augers to accurately convey, mix, and meter the material to the downstream process. Using a variable speed shredder shaft, augers, and updated Auto-Pilot controls, the level of size reduction is accurately controlled. The cutting process can introduce varying levels of heat into the material. This is used, in conjunction with an air-flush system, to reduce the levels of residual moisture in the material before it enters the extrusion process.

Just ahead of K2025 came an announcement that compounding system maker **Leistritz** and NGR were teaming up in the recycling arena. The cooperation focuses on recycling and compounding in one step to produce high-quality material, which the partners said is particularly needed for polyolefin films to meet quality and defect-free requirements. Material preparation is carried out using NGR's C:Gran cutter-compacter-extruder technology. The material is then further processed in a Leistritz twin-screw extruder.

In the announcement, the companies also indicated the importance of efficient degassing for removal of VOCs, for example for food-grade applications. Optimisation of mechanical properties through the addition of additives, fillers and stabilisers is another focus in the partnership.

A joint recycling and compounding system has been installed at the NGR Test Centre in Feldkirchen an der Donau, Austria, to demonstrate the combined technologies. The system is designed for throughput of approximately 300-500 kg/h and is available for customer trials.

In January this year, Leistritz said it had worked in close collaboration with NGR on a project in Finland. The customer, **Syklo**, has expanded its packaging recycling capacities at its facility in Hyvinkää. Three new cascade extrusion lines 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%, said Leistritz.

At Syklo's new Circular Economy Hub, the three recycling extrusion lines process mixed post-consumer plastics from household and commercial waste. The waste is first processed by NGR's C:Gran technology, consisting of a cutter-compactor and a single-screw extruder, and then fed to a Leistritz ZSE twin-screw extruder with Maxx technology.

K2025 exhibitors

Among the major suppliers of recycling lines exhibiting at K2025, Amut, Gamma Meccanica, Coperion and Gneuss showed technologies relevant to film recyclers. **Amut** said key highlights on its stand included the unveiling of a new polyolefin pelletising line, designed to seamlessly integrate with its washing and sorting systems. The line combines a purpose-built pre-treatment unit with advanced extrusion technology and Amut's dedicated "granulAltion" software suite.

New developments exhibited by **Gamma Meccanica** included Smart recycling lines. These shredder-extruder models have been designed as compact units, reducing the floor space need for

IMAGE: COPERION



installation and operation. Up to three dosing devices can be connected to the extruder's inlet, in addition to the material coming from the shredder. Compac Smart lines are available in a range of production capacities from 500 to 2,000 kg/hr.

In an outdoor pavilion, **Coperion** displayed its new ZSK FilCo filtration compounder which enables recyclate filtering and subsequent compounding in one step. To fully exploit the ZSK FilCo's high performance, the company said raw materials must be supplied at a constant rate with no intake limits.

Pelletising or compacting feed materials uses a lot of energy and increases capital and operating costs, said Coperion. The company's answer is its ZS-B Megafeed side feeder, which can transport materials with a bulk density down to 20 kg/m³ into the ZSK FilCo and other ZSK extruders. This allows for recycling and compounding of lightweight, high-volume fibres and flakes at high throughputs. It showed another feeder relevant to film recycling, the MechaTron FB (flat bottom) feeder, a gravimetric feeder suited to high-capacity recycling operations for materials including PP and PET film.

Left: Coperion has launched the ZS-B Megafeed side feeder for lightweight, high-volume fibres and flakes

CLICK ON THE LINKS FOR MORE INFORMATION:

- > www.recycling.starlinger.com
- > www.erema.com
- > <https://mas-tech.com>
- > www.siempelkamp.com
- > <https://ngr-world.com>
- > <https://extruders.leistritz.com>
- > <https://syklo.com>
- > www.amut.it
- > www.gamma-meccanica.it
- > www.coperion.com
- > www.endplasticwaste.org

recycling.starlinger.com

THE ART OF POST-CONSUMER PLASTICS RECYCLING

TECHNOLOGY FOR A TOMORROW WORTH LIVING IN



The new **recoSTAR dynamic art** recycling system processes a wide range of used plastics and scores with its increased throughput and ease of operation and maintenance. It is particularly suitable for heavily contaminated post-consumer plastic waste with high moisture content, and produces high-quality regranulate that can be used in demanding applications.





AMI Plastics World Expos NORTH AMERICA

NOVEMBER 11-12, 2026 // CLEVELAND, OHIO, USA



THE FOCUSED TRADE SHOW FOR PLASTICS COMPOUNDING, EXTRUSION, RECYCLING AND TESTING

CONFIRMED EXHIBITORS INCLUDE:



CO-LOCATED EXPOS:

COMPOUNDING
WORLD EXPO

POLYMER TESTING
WORLD EXPO

PLASTICS EXTRUSION
WORLD EXPO

PLASTICS RECYCLING
WORLD EXPO

BOOK YOUR BOOTH TODAY >



METTLER TOLEDO

Michigan Additive
TECHNOLOGIES



Milliken



Mitsui Chemicals

MIXACO

MoistTech Corp.

NAGASE
Nagase America LLC

nanoScience
Instruments

NanoXplore
Performance Through Carbon Chemistry

NETZSCH
Proven Excellence.

NEXAM
CHEMICAL

NGR
PLASTIC RECYCLING TECHNOLOGIES

NFM



NOF

NORAC
ADDITIVES

o.a.
newton

ODEN
TECHNOLOGIES



Orbetrion

PALMER
HOLLAND

Paulson
Training Programs, Inc.

Peacock
colors inc.

Performance
Additives

pinfa
North America
Phosphorus, Inorganic & Nitrogen Flame Retardant Association

Piovan
UnaDyn

plasomec
Excellence in Mixing

PlastiCal



PMC

POLY
compounding, LLC

Polychem
Dispersions
INCORPORATED

polykemi

Polyvel Inc.

Prime Materials

PRISM
WORLDWIDE

PROCESS CONTROL CORPORATION
Advanced Control and the Process Automation Division

PrimaXX

PROMIX
Solutions

PROTON
PRODUCTS

PSI
POLYMER SYSTEMS INC.

PTi

Q
LAB

RB
R&B Plastics
MACHINERY LLC

REELPOWER
INDUSTRIAL

Reiloy USA
REIFENHAUSER GRUPPE

Revolution

Rianlon

Routsis Training
Hands-on, Online, Ongoing.

Royce
GLOBAL

SCANTECH

SCHAKE
INDUSTRIES, INC.

SCHWING
TECHNOLOGIES

SCIENCES
COMPUTERS
CONSULTANTS

Shamrock
TECHNOLOGIES

SIKORA
Technology To Perfection

SILON



SMITHERS

SOLENO
MASTERING WATER SUSTAINABLY

SonicAire

SPIRA
fi



STADLER
Engineering at its best

STAR
PLASTICS

STEER

struktol

Supreme
People who know plastics best

SYNCRON
GROUP USA

TA
Instruments

TPEI
Technical Process
& Engineering Inc.
Customer Service, Uncompromised Duty

TECHNOGENIA
Laboratory Technology Center

TEXAS
EXTRUSION
SERVICE, INC.

THE
POLYMERS
CENTER

ThermoFisher
SCIENTIFIC

Tinius
Olsen
The First Name In Materials Testing

TOYOTA TSUSHO
AMERICA, INC.

TRECORA
Resources

TRENDELKAMP

TSM

UCC
United Container Company

USE
EXTRUDERS

US
SILICA

USA ROLLS

UWAY

VAN DYK
recycling solutions

Virtus
Equipment

VORTEX

WACKER

WERNER
SHREDDING + COMPRESSING

Westlake

XALOY

ZEPPELIN
WE CREATE SOLUTIONS

JWELL

SEE THE FULL LIST OF EXHIBITORS [HERE >](#)

PROUDLY SUPPORTED BY:

Compounding
WORLD

Film and Sheet
EXTRUSION

Pipe and Profile
EXTRUSION

Plastics Recycling
WORLD

Injection
WORLD

AMI | Events

Flexible Packaging Innovation and Recycling

June 24-25, 2026 | Milwaukee, WI, USA

Form, Function, Design: The Future of Flexible Packaging

Industry-leading speakers include:



Astrid Torres
TOPPAN Packaging
Americas



Rebecca Mick
Association of
Plastic Recyclers



Eric Hair
Henkel Corporation



Megan MacCallum
Benesch Friedlander
Coplan & Aronoff



Maite Quinn-Richards
U.S. Flexible Film
Initiative (USFFI)



Dan Felton
Flexible Packaging
Association (FPA)

BOOK YOUR PLACE TODAY

Pelletiser progress on show at K2025

Developers of pelletising systems for resin, compound and recycle producers displayed their innovations at the K Show last October. By Chris Saunders



IMAGE: MESSE DUSSELDORF

The world of pelletising, the process of transforming shredded, melted plastic waste or virgin polymers into small, uniform, dry pellets is evolving rapidly. Significant advancements are being made industry-wide, driven by sustainability mandates, digital automation, market demand, and innovations in hardware and control systems. For example, at the most recent K Show in Dusseldorf, Germany, last October, **Bay Plastics Machinery (BPM)** showcased its Smart (System for Monitoring, Analysis, Recipes and Training) Control for pelletising systems, which lets users precisely control machine speeds, pellet length, and other process parameters while tracking data trends and production events.

The system instantly shows motor data and machine speeds and includes BPM's Digital Pellet Length Control algorithm. Line speeds can be changed at the touch of a button on the main screen or remotely at the operator station, and each pelletising machine has a dedicated control screen and customisable settings to allow for precise operation, easy adjustments, and fast diagnostics. Videos, 3D models, manuals, and educational documents, are accessible through the interface so operators can learn in real time, while the control's troubleshooting tool lets technicians examine active data, which is particularly useful for remote troubleshooting.

"We're Introducing Industry 4.0 to strand pelletising," said Jim Forgash, Vice President of Sales at BPM. "[And] looking upstream at how things are affecting the pelletising process, allowing our customers to document that process and acknowledge to their customers that their process is accurate. We can remotely communicate with the machinery to help troubleshoot, and training videos help the customer become very self-sufficient."

The company used the trade fair to exhibit several pieces of equipment, including one of its flagship AXP08 strand pelletisers featuring the Smart Control system in action, a BT25X lab-scale pelletiser, and a BP50, which has also been designed for lab-scale operations and light production runs. To enable it to more efficiently serve its customers in the EU, BPM, which is headquartered in Michigan, US, is opening a facility in Uden, the Netherlands, and an office in Amsterdam. The Uden facility will store parts and some small equipment so the company can ship in-stock parts to customers within two days of receiving an order, negating often lengthy wait times.

Maag Group unveiled a host of new technologies centred around integrated system solutions at K2025. "Our systems stand for innovation, quality, and efficiency," said Ueli Thuerig, President of Maag Group before the show, while underscoring how

**Main image:
The Maag
Group stand
at K2025**

technical excellence and smart design are transforming the plastics processing landscape. A key element of the group's display was the debut of the Pearlo CS, which the company says marks a milestone in compact pelletising systems. Drawing on the proven Pearlo series, it features the familiar tangential cutting chamber and optimised cutter design. Offered in two sizes, it targets production scales where flexibility and efficiency are essential.

"We developed the Pearlo CS specifically for manufacturers who need top-tier performance in a streamlined footprint," said Product Manager Rico Sandmann.

A Pearlo 350 pelletiser equipped with EAC technology and new die plate design ensuring long tool life, precise cutting, and reduced fines for premium granulate, was billed as the largest underwater pelletising system used in PET production. For high throughputs, the Central Injection System die plate introduces water centrally through the die plate to reduce agglomerates and improve pellet cooling for high-MI polymers.

Strand and underwater

Also on display at the event was an EBG semi-automated dust-reducing dry cut strand pelletising system which offers flexible process control with reduced strand breaks, low moisture content, and minimised dust formation, along with an updated version of the M2-USG underwater strand pelletising system, with an enhanced design. Featuring an enlarged rotor diameter and improved water flow, the next generation M2-USG enables greater throughput and superior pellet quality while additional sensors boost process stability. These enhancements can help customers achieve consistent quality with increased performance, thereby boosting overall efficiency.

Pelletising of fibre-reinforced plastics and other abrasive polymer strands tend to put extreme stress on cutting blades. Typically, polycrystalline diamond-tipped (PCD) blades have been used in such applications, but they are said to be up to five times more expensive than carbide or cemented carbide tools. Maag has developed a new blade material that it says offers longer service life at an affordable price. Its Duration Cutting Blade features VS23, which the company says can increase the hardness of the surface by up to 70%, reducing wear rate and extending the service life by a factor of five to nine compared to conventional carbide tools. This offers a cost-effective alternative to expensive PCD tools by reducing downtime and tool changes in demanding applications,



The M2-USG UP from Maag was one of the items on display at K2025

IMAGE: MAAG

according to the company.

K2025 was also notable for being **Sikora's** first public appearance under its new brand identity and as part of the Maag Group, following its acquisition earlier in the year. The cooperation between the two companies opens up a wide range of technological and geographical synergies. Sikora's expertise in measuring and control technology complements the Maag Group's portfolio in the areas of pump, filtration, and pelletising systems. A close regional proximity also offers advantages, with both having strong presences in the Dach region while being well positioned internationally. The repositioning is said to be very well received by customers and partners alike, reflecting technological advancement and a visible growth strategy.

Recycling

Farrel Pomini is now offering what it says is a cost-effective and safe method for processing virgin or recycled rigid PVC that eliminates traditional finishing requirements with its newly designed Dry Face Pelletiser (DFP). The process begins by compounding the rigid PVC with the Farrel Continuous Mixer (FCM) to a hot-feed single-screw extruder. The PVC cools as it passes through the extruder and moves on to the proprietary DFP that minimises die pressure and potential temperature increases while efficiently cutting pellets. After pelletising, an air transfer system completes the cooling process along with pellet classifying and dust and fine particle removal.

This concept eliminates the need for finishing the rigid PVC with a two-roll mill, water bath, and dicer, allowing for a smaller capital investment and equipment footprint as well as expedited return on investment and enhanced safety. The company says the compact DFP is easy to operate and can be fully integrated into the user-friendly Farrel

Pomini Synergy control system. Plus, the entire line can be completely automated with minimal operator involvement.

China recognition

Cutting edge technology is now spreading far and wide. When the 2025 Jiangsu Province 'Three Firsts and Two Innovations' list, which recognises cutting-edge products and technologies, was released, it featured Chinese company **Useon** for its achievements in high-end PP extrusion pelletising equipment. The recognition was due to a large scale PP pelletising line with a capacity of 100,000 tonnes/yr being independently designed, manufactured, and installed in the workshop of a major domestic petrochemical enterprise. Useon said that by continuously overcoming challenges in key core technologies, the equipment has achieved a level of stable mass production, expanding the customer's profit margins in high-end markets. The project was included in the 'First Set' of the list, indicating the first time a major equipment or product has been developed and used in China.

"Polyolefin extrusion pelletising systems have long been constrained by foreign technology

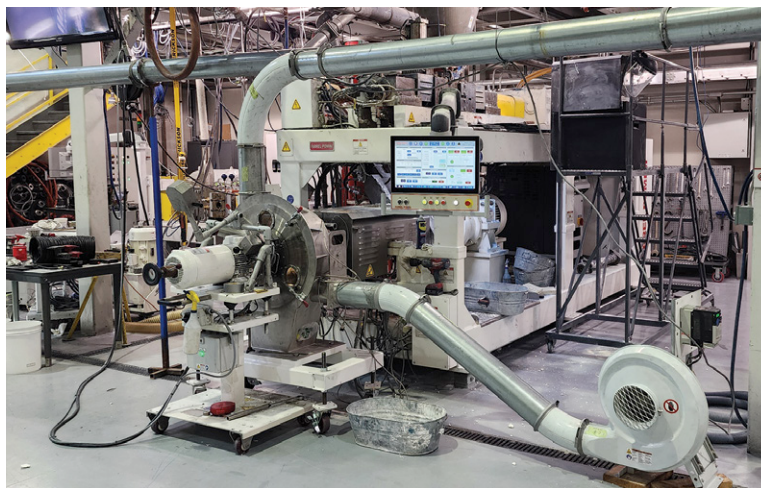


IMAGE: FARREL POMINI

barriers with equipment procurement cycles reaching up to 14 months and costs being extremely high," the company explained. "Through localised technology breakthroughs, Useon has shortened the delivery cycle to 10 months while ensuring equivalent technical performance, significantly reducing customers' procurement costs and enabling production to start months earlier. This is expected to generate additional output value of up to RMB 300m (€36m)."

Above: Farrel Pomini's DFP eliminates traditional finishing requirements to more safely process virgin or recycled rigid PVC



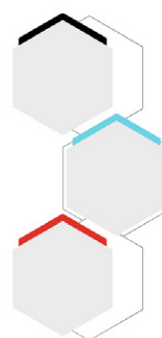
PLASBLAK® 628

SERIES BLACK MASTERBATCH

for materials compounded, molded, or extruded from recycled resins



Scan for brochure



High covering power

Cost effective

Reliable performance

CABOT 

Right: The Econia 3000 is a fully automated underwater pelletising system designed by Econ for highly efficient and sustainable production

The company says it will continue to uphold its development philosophy of creating value for customers and continuously empowering the industry, accelerate the R&D and industrialisation of domestic high-end equipment, and contribute to achieving independent control of more key technologies in Chinese manufacturing.

The CPS-F is a scalable pelletising platform, developed by **Buss** for demanding compounding processes. The new CPS-F 200 unit, the first size in the flange-based design that can be directly connected to the company's Compeo kneader series, was presented at K2025 with additional sizes following from early 2026. The CPS-F is particularly suitable for cable and performance compounds, as well as viscous or porous polymers. Well-designed mechanical interfaces mean the unit can be combined not only with Buss systems but also integrated as an OEM-independent solution into existing compounding lines. The adaptable flange, adjustable discharge height, and easily accessible utility connections for water and electrical supply, enable flexible integration even with limited installation space.

Cutting consistency

The heart of the CPS-F is an exchangeable, segmented die plate with special geometry that compensates for thermal deformation. This keeps cutting quality consistent even under high pressure and temperature, a key aspect for consistent pellet quality. A rear-mounted drive allows access to the cutting zone without having to open the drive train, which saves time during cleaning and maintenance. A manual rotor brake with release mechanism and viewing windows with optional lighting further enhance operational safety, while additional

features include an optional screen changer for inline filtration, integrated pressure monitoring for process control, short material flow paths for clean processing, and compact, accessible design with clearly defined interfaces. With a throughput range of 80 to 3,500 kg/h, the CPS-F

series, comprising four sizes, spans a broad application spectrum, from flexible lines to high-performance production.

Compared to conventional underwater pelletising systems, Buss said the CPS-F offers advantages including up to 50% lower pressure drop meaning more energy-efficient



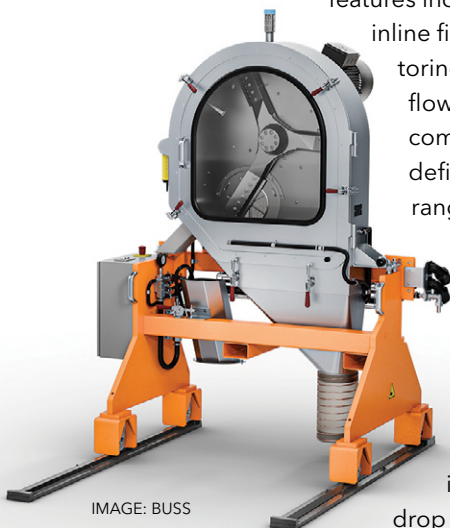
operation and a 20-25% lower total cost of ownership. It is suitable for dual-mode users as the unit is switchable between wet and dry operation so it can be used in various application product families. Particularly helpful for manufacturers working with changing formulations or materials sensitive to temperature variations, the CPS-F represents a precise, reliable, and economical solution whether for cable compounds, performance compounds, or specialty applications, according to the company.

Glass fibre

At K2025, Austrian company **Econ** presented its own underwater pelletising system, EUP50, in combination with the Econ Dehydrator, to showcase the granulation of glass fibre-reinforced polymers under real production conditions. The material composition used (PP with 30% glass fibre content) imposes demanding requirements on process stability, cutting precision, and drying efficiency. The company said it chose this arrangement to demonstrate how precise control of process parameters, consistent pellet formation, and reliable residual moisture removal, can ensure uniform product quality even under challenging processing conditions. Econ product specialists were on hand to explain the features and functional principles of the system, including the hydrodynamic design of the cutting head, process water temperature control, and the energy-efficient operation of the dehydrator, helping K visitors gain insights into the system's operation and its suitability for demanding pelletising applications.

In addition, Econ presented other highlights from its current product portfolio, including the Econia 3000, a fully automated underwater pelletising system designed for highly efficient and sustainable production which offers intelligent process control for optimal resource utilisation. Meanwhile, the EPO-N 1000 system provides exceptional flexibility and productivity through its modular construction and adaptable process

Below: The Buss CPS-F 200 pelletising system for cable and performance compounds



control, and the monitoring solution PelletVision enables automated, real-time analysis of pellet quality, supporting continuous process control and quality assurance.

Filtec, an Italian, family-owned company that specialises in the design and manufacture of customised pelletising systems, says that it recently supplied its UW Lab system to several customers seeking compact yet high-performance solutions for their laboratory activities or small-scale production. It is described as a versatile underwater pelletising unit designed to handle throughputs of up to 50 kg/h, depending on the type of material, and is ideal for pilot lines, formulation testing, and small-batch production. Filtec said that in the facilities where it has already been installed, UW Lab has proven its effectiveness on a wide range of materials including various grades of PP along with PE, thermoplastic elastomers (SEBS, SBS, TPE), and various polyesters such as PET.

Pellet sorting

Inspec.tech has upgraded its Raw Material Inspection (RMI) pellet inspection and sorting systems with improved cameras and lighting



IMAGE: INSPEC.TECH

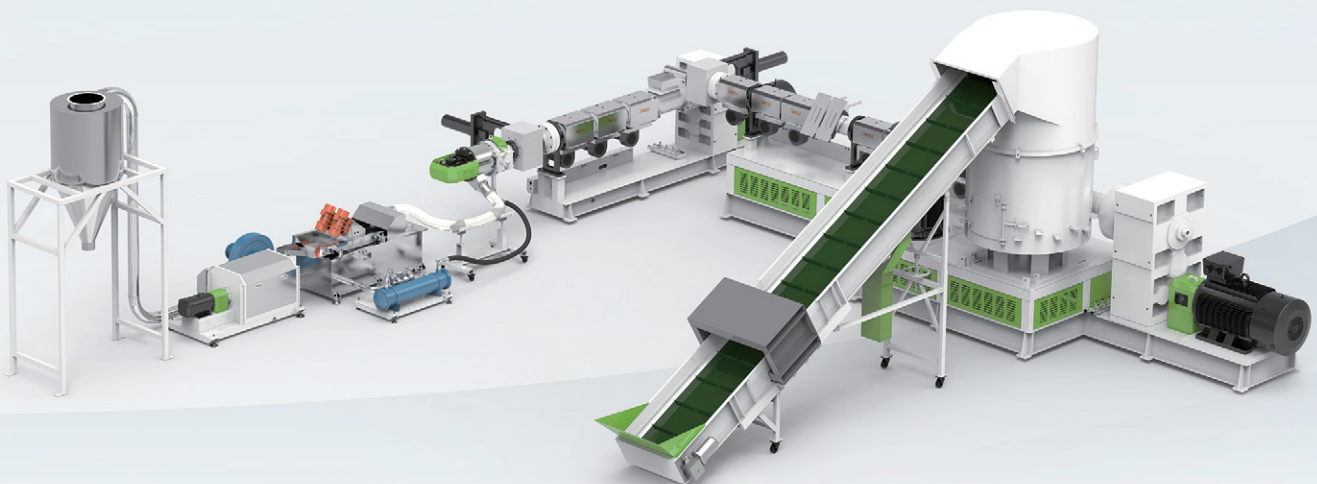
technology, including smaller defect detection and alternative light sources including UV lighting strategies if required. Additional developments include enhancements to camera and lighting positioning for improved detection and rejection of defects based on size, shape, colour, contamination such as black specs or burnt material, and cross-contamination.

While commonly applied inline with resin

Above:
Inspec.tech's
RMI pellet
inspection and
sorting systems
have been
significantly
upgraded



WASTE PLASTIC RECYCLING SOLUTION



JWP Series Three Machine Integrated Pelletizing Machine

CHUZHOU JWELL MACHINERY CO.,LTD.

Add: No.218, west Tongling Road, Chuzhou City, China
Whatsapp/Wechat/Mobile: +86-139 1621 5585
salbba@jwell.cn sales@jwell.cn www.jwell.cn

Chinaplas® 2026
国际橡塑展
Booth No: ND32

Delta Tecnic launches Super Small Pellet

Pellet size is a crucial factor in masterbatch manufacturing. Traditionally, the market has mainly focused on standard granules, which have limitations in colour dilution and homogenisation when used in certain applications. Over time, **Delta Tecnic** has developed different pellet sizes, ranging from micropellets to small micropellets (SMP). Now, the company has released the Super Small Pellet (SSP).

Its smaller diameter means the SSP integrates more efficiently, covering the same colour surface area with a greater number of small particles rather than fewer larger ones significantly enhancing the quality of the final product, according to the company. Plus, in the PVC industry where raw materials are often supplied in powder form, the use of large pellets can lead to settling issues where heavier grains settle at the bottom of the mix.

SSPs are manufactured using an advanced process which typically involves cryogenic grinding. This method not only eliminates the need for mills and other energy-intensive equipment, but also reduces the generation of fine particles which improves worker safety by minimising the risk of inhaling them.

Versatility

The pellet's versatility allows production from small batches of 25 kg to large volumes as required, this level of flexibility being particularly advantageous in the manufacture of PVC films, compounds, and rigid profiles, where optimal dilution is critical. In addition to this, the company said that, the ability to produce small batches supports customisation of colours and properties, enabling Delta Tecnic's customers to meet market demands and specific application needs.

production or compounding, the RMI can also be easily adapted as an offline or portable system moving from line to line. This technology is suitable for resin producers, compounders, recyclers and repelletisers, as well as consumers of pellets who require incoming pellet inspection for critical products and applications.

The company has also introduced its new Material Recovery System (MRS). Based on the proven RMI technology, this system performs automatic, repeated sorting cycles until optimal separation and sorting is completed, enabling the recovery of high value polymers by separating by contamination, colour, size, and shape.

Another innovation from Inspec.tech is the new Raw Material Inspection Lab Model, using the same vision inspection technology as the RMI and MRS. This integral and compact desk top system is capable of handling throughputs ranging from 3 to 66 lbs/minute. Advantages include greater reliability, larger sample sizes, faster and more accurate inspections. Air nozzle sorting is available as an option.

CLICK ON THE LINKS FOR MORE INFORMATION:

- > <https://bayplasticsmachinery.com>
- > <https://maag.com>
- > <https://sikora.net>
- > www.farrel-pomini.com
- > www.useon.com
- > <https://busscorp.com>
- > www.econ.eu
- > www.filtecsrl.eu
- > <https://inspec.tech>
- > <https://deltatecnic.com>



SPREAD THE WORD

Let the world know about the good things your company is doing by advertising in *Plastics Recycling World* magazine. Request the media pack to find out about our forthcoming features, global readership, and cost-effective advertisement packages. [CLICK HERE TO DOWNLOAD](#)



AMI | Events

Chemical Recycling

8-10 June 2026 | Frankfurt, Germany

Exploring the potential of chemical or advanced recycling to turn waste plastics into new materials

Hear from industry leading speakers, including:



Outi Teräs
Technology Commercialization
Neste



Mika Härkönen
Professor of Practice
VTT Technical Research
Centre of Finland



Manica Ulcnik-Krump
Managing Director
Interzero Plastics Innovation



Fabian Loske
Senior Manager
Sphera

Plus: Join us on the afternoon of 8 June 2026 at Technip Energies' Zimmer® Polymer Technologies Lab in Frankfurt!*

*Subject to approval - express interest while booking your place.

**Discounts not valid in conjunction with other offers. Expires 10 April 2026

SAVE 15% ON YOUR DELEGATE PLACE**

Sponsored by:



The global meeting points for the future of **textile recycling**

Brought to you by

AMI



Discover innovators driving circularity in textiles



Meet leading players and expand your professional network



Unlock expert insights from industry leaders



TEXTILES RECYCLING EXPO USA

April 29-30, 2026
Charlotte, NC

**CLICK HERE FOR MORE
DETAILS**

FREE TO ATTEND!



TEXTILES RECYCLING EXPO

24-25 June 2026
Brussels, Belgium

**CLICK HERE FOR MORE
DETAILS**

Medical matters: PVC and polyolefins recycling



IMAGE: VINYLPLUS HEALTHCARE

Developments in recycling medical devices and packaging include creation of the VinylPlus Healthcare platform, and partnerships between industry and hospitals. By David Eldridge

Plastics waste and greenhouse gas (GHG) emissions from the healthcare sector are growing each year and could rise by 35-40% by 2040, pushing costs for health systems in Europe and North America above \$76bn. This startling prospect, presented in a report by **Systemiq** and Eunomia (*A Prescription for Change: Rethinking plastics use in healthcare to reduce waste, GHG emissions and costs*), reflects the increasing demand for single-use plastics in hospitals, clinics and other healthcare settings. The growth projection comes after the global Covid pandemic early in the decade brought to the foreground the issue of disposable plastics, such as protective wear and packaging, and the waste they generate after their medical usefulness.

Reducing unnecessary use of items and switching from disposable to durable versions of gowns, trays and masks would help reduce plastics waste, and these measures are among the recommendations in the report. Along with improving recycling through better design and segregation and

procuring low-GHG plastics from bio-based or carbon-capture sources, the report said these interventions could cut single-use plastics by 53%, reduce GHG emissions by 55%, and deliver annual savings of \$18bn by 2040 compared with a Business-as-Usual Scenario.

The pandemic plastics mountain provoked concern among healthcare leaders and stakeholders, leading hospital groups in North America and Europe to initiate projects to reduce plastics waste and start recycling programs. Solutions are also being developed by companies and organisations in the plastics industry, usually in projects with healthcare partners.

In the PVC industry, **VinylPlus Healthcare** is a platform that was launched last year to unify the industry's sustainability focus in healthcare. The European PVC industry has improved recycling in areas like window profiles, flooring and cables for the past two to three decades via the VinylPlus platform and its predecessors. VinylPlus Healthcare

Main image:
Clean, sorted
PVC medical
tubing ready
for recycling

IMAGE: HPRC



Above: HPRC, UKB and Tomra have carried out sorting trials in Germany

unifies the work of previous health sector initiatives including the PVCMed Alliance, VinylPlus Med, and VinylPlus PharmPack in one coordinated platform.

"VinylPlus Healthcare was created to bring together expertise and efforts from different initiatives, ensuring a more coordinated and effective approach," said Ole Grøndahl Hansen, Project Leader of VinylPlus Healthcare. "With this platform, we hope to foster a more nuanced debate on vinyl in the healthcare sector – one that recognises both its technical benefits and its evolving sustainability profile."

PVC progress

In its Progress Report 2025 (covering recycling activities in 2024), VinylPlus discussed healthcare developments in addition to other sectors, such as construction. In 2024, 23 hospitals were part of the VinylPlus Med programme and eight more were due to come online in 2025.

In France, a number of hospitals worked with **Terra**, a circular economy specialist, and Medtronic studying the feasibility of recycling. Dialysis lines, soft PVC medical devices and rigid PVC video-laryngoscope blades, which are widely used in medical settings, could make a significant contribution to medical PVC recycling in the future. Another project in France explored recycling single use PVC medical devices such as tubing and masks into new products for healthcare settings such as flooring components.

Many doses of medication are safely delivered in aluminium/PVC blister packs and the VinylPlus PharmPak project aimed to show in a study how effectively blister packs can be recycled. Larger scale trials at **Fraunhofer IVV**, Dresden, Germany, found that dissolution technology could be used with feed from blister packs to successfully make rigid films. These could be re-used in blister packs. Mechanically recovered materials from blister packs can be used in profiles and PVC pipes.

With its initiation last year, one of VinylPlus

Healthcare's first activities was to commission **Aimplas** in Spain to do a study on recycling flexible PVC widely used in medical devices. Findings from the study confirm that flexible PVC can be mechanically recycled up to six times without compromising its technical properties. These findings support vinyl's key role in a circular healthcare economy, said VinylPlus Healthcare. The use of PVC leads to reduced waste, optimised resource efficiency and maintaining the highest standards of patient safety, it said.

The recycling study strengthens the knowledge base on vinyl's recyclability and underscores the need to expand collection and recycling efforts in healthcare and elsewhere, said VinylPlus. Charlotte Röber, Managing Director, said: "It is well established that rigid PVC can be recycled several times without significant loss of quality. Now, the Aimplas study has confirmed that it also applies to soft applications. This reinforces vinyl's strong position in mechanical recyclability."

In February this year, at the closing event for the Select4Care collaborative project, VinylPlus Healthcare presented the current status of medical PVC plasticisers, highlighting how substitution of DEHP with safe, regulated plasticisers is well advanced. "This progress is a key enabler for recycling in practice across most medical applications and directly supports the development of viable recycling schemes," it said.

Discussions at the event also considered the requirements needed to scale up medical PVC recycling: selective collection at hospital level, strong material knowledge, informed design choices, and clear, consistent regulatory frameworks across the value chain. VinylPlus Healthcare said that several are actively participating in a dedicated medical PVC recycling scheme that has been operational in Belgium since 2022, and this experience can inform future work.

Participants went on site visits to AZ Jan Portaels in Vilvoorde, a hospital actively collecting medical vinyl, and to De Loods Nekker in Mechelen, a dismantling hub operating within the social economy. "Clean, well-sorted medical PVC tubing and masks ready for recycling clearly demonstrated how careful collection, dismantling and handling enable high-quality recycling in practice," said VinylPlus Healthcare.

Further discussions considered the next steps for strengthening existing schemes. This focused in particular on how co-collection with other hospital waste streams, such as blue wraps and surgical trays, can be optimised to improve logistics efficiency while maintaining material quality.

"Together, these activities underline that medical PVC recycling is no longer theoretical. With the right material choices and systems in place, it is already working," said VinylPlus Healthcare, and this provides a solid foundation for the next stage of its recycling activities.

Polyolefins pilot

While PVC continues to be the high-volume plastic material in medical devices, polyolefins are the dominant single-use plastics for packaging of devices and pharmaceuticals, followed by PET. The **Healthcare Plastics Recycling Council** (HPRC) recently published a case study that throws light on unlocking recycling potential in this area, with a particular focus on sorting waste streams. It said that following on from the first pilot in the Netherlands, which demonstrated the technical feasibility of manual sorting, this second-phase study tested automated sorting technologies under real-world conditions in Germany. The trial was done in collaboration with **Universitätsklinikum Bonn** (UKB) and sorting technology group **Tomra** and assessed whether industrial-scale systems can reliably sort healthcare plastic packaging waste

with the accuracy and throughput needed for sustainable recycling.

In the second phase of the pilot study, healthcare plastic waste collected from hospital operations was processed at the Tomra test centre in Mülheim-Kärlich, Germany, where ballistic separation into rigid and flexible fractions was followed by optical sorting into PE, HDPE, PP, and PET streams. This phase scaled up the process by testing automated sorting of all material types found in rigid and flexible plastics, while assessing material purity under real-world conditions. HPRC said the trial provided insights into technical performance, contamination risks, and opportunities for improving pretreatment steps, helping to define best practices for scalable recycling of healthcare plastics.

HPRC said: "This study has demonstrated proof of principle that healthcare packaging materials, collected within a hospital environment, can be sorted using commercial waste handling processes." But some challenges became apparent in the pilot study, such as differences in waste item size and multi-component/multi-material design.

HPRC said that sorting efficiency in the rigid plastics fraction was 45% and the remaining 55%

AMI | Databases

Plastics Processors Worldwide

Our databases don't offer ordinary!
Dive into our updated regional data
of plastics converting sites



The Balkans

>1,100 sites



Germany

>2,800 sites



Eastern Europe

>3,500 sites



Africa

>1,500 sites

Request your free sample

Right: Envetec's patented Generations process enables facilities to disinfect and shred biohazardous plastic waste at the point of generation

was rejected. In the flexibles fraction, the process sorted a wide range of medical device packaging into the PE stream (the only material targeted for separation). "Closer inspection showed this PE fraction contained multi-material films that may lead to compromises in the quality of the recycling stream," said HPRC. "Packaging and medical devices composed of multiple materials significantly complicate sorting and segregation. Ideally, these mixed-material components should be rejected during sorting; however, there is a substantial risk that they enter recycling streams, leading to contamination."

Residue concern

A risk of critical concern comes from clinical waste, due to the possible presence of blood, needles or drug residues. HPRC said methods for reprocessing contaminated hospital waste from existing waste streams are being developed, but this is an expensive alternative and requires specific waste processing facilities.

It said: "For hospital waste to be accepted by existing sorting and recycling centres, the risk of contamination must be further controlled. To address this challenge, efforts are underway to standardise hospital waste management practices."

One initiative, which is being led by the regional German hospital association Krankenhausgesellschaft Nordrhein-Westfalen in collaboration with UKB, Circularmed, and three other pilot hospitals, aims to develop "an intuitive waste management system that reduces incorrect disposal, enhances recyclability, and ensures both healthcare worker safety and environmental protection throughout the process", said HPRC.

Polyolefins producer **Sabic** said a collaborative project has successfully proven the concept of recycling clean medical plastics back into the healthcare materials stream in pilot projects. Its

Below: Sabic and partners have demonstrated the potential of recycling non-contaminated hospital waste back into virgin polymers



partners were **Zuyderland** medical centre in the Netherlands, packaging converters Coveris and ACE, and brand owners **Artivion** and Mölnlycke Health Care.

A medical plastic waste collection program was started by staff at Zuyderland in June 2024 to deal with plastic waste that would normally be incinerated. The program targets non-contaminated plastic waste that has not come into contact with patients, blood, or bodily fluids. This waste was prepared and transported to Sabic to use as feedstock in its pyrolysis plant, converting the waste into pyrolysis oil which Sabic can use as a contribution in the production of its Trucircle-branded PE.

New applications

This PE material was subsequently used in two new healthcare applications. Coveris produced packaging with 25% content attributed to recycled medical waste for Artivion's guide wire used in vascular surgery. Mölnlycke Health Care produced surgical drapes with 49% content attributed to hospital-generated plastic waste to be delivered in the ProcedurePak solution made with a material component from ACE.

Karl Will, Vice President of Sales & Marketing, EMEA at Artivion, said: "Through our participation in the Sabic Trucircle project and partnerships with Sabic, Zuyderland, and Coveris, we're looking into ways to reduce waste and build a scalable recycling model. These partnerships help us not only address today's surgeon challenges but also look to the future to create a more sustainable industry for generations to come."

BD, the medical devices group, announced in January that it had successfully completed a joint feasibility study into recycling polystyrene Petri dishes into new, high-quality manufacturing feedstock. It said the results of the pilot study



AMI | Events

Polymer Sourcing and Distribution

19-21 May 2026 | Hamburg, Germany

Headline sponsor



Understanding global plastics trends and shaping strategies for success

Meet some of our confirmed speakers:



Mike Boswell
Chairman
Plastribution



Patrick Hore
Global Vertical Head of
Energy, Chemicals and
Raw Materials
Maersk



Petteri Martikainen
Vice President, Plastics
Telko



Esteban Sagel
Principal
Chemical and Polymer
Market Consultants



Rinus de Kok
Manager - New
Business
PRS Pooling



Mark Harrison
COO
Atalant

FIND OUT MORE AND BOOK TODAY



AMI | Events Biax Film

3-5 March 2026 | Vienna, Austria

Connecting the global biaxially-oriented film supply chain
to deliver future material solutions

Confirmed speakers include:



Steven Sze
Forop Advanced



Pankaj Poddar
Cosmo First



Marco Lelli
Coveme



Omar Gonzalez
Oben Group

Event sponsored by:



BOBST



BOOK YOUR PLACE TODAY

suggest that other plastics including PET, PP and PE could also be reused in the manufacturing supply chain after being safely disinfected and processed. These polymers are widely used in medical devices, such as those made by BD, it said.

The partner company in the study was **Envetec Sustainable Technologies**, based in Ireland. Its patented Generations process enables facilities to disinfect and shred biohazardous plastic waste at the point of generation, producing clean polymer flake suitable for recycling into new products.

In the pilot study, unused BD BBL prepared plated media for sample testing were processed as post-industrial material. The plates and their contents were shredded, separated, chemically disinfected, and transformed into recycled, clean polymer flakes. These flakes were extruded into polystyrene pellets and moulded into new Petri dish prototypes. Material property testing and moulding feasibility were successfully completed, said BD.

Proof of concept

"This pilot marks the first step in a broader effort to demonstrate the feasibility of recovering and recycling multiple types of plastic products across healthcare supply chains," said Malcolm Bell, CEO of Envetec. "By creating a proof of concept for a pathway that allows regulated plastics to be safely treated and returned to productive use, we are opening the door to sustainable solutions that can help the industry avoid landfill and keep valuable materials in circulation."

Envetec and BD said they see clear opportunities to expand the pilot, cut reliance on virgin plastic, and keep high-value polymers in circulation.

"Single-use devices made of high-quality plastics play a critical role in modern healthcare due to safety, ease of use and scalability, but we recognise the long-term impact that these materials can have on the environment," said Nikos Pavlidis, worldwide president, Diagnostic Solutions at BD. "This pilot, conducted by BD's Sustainable Medical Technologies Institute, represents an important step toward enabling circular economy solutions for other high-volume healthcare consumables made from commonly used plastics, such as blood collection tubes, syringes and packaging."

Envetec's Generations technology is currently being deployed in biopharma and life science facilities, hospitals, and food and beverage sectors across the US and Europe. In collaboration with customers and recycling partners, Envetec is developing sustainable circular pathways for treated laboratory plastics. This process involves converting clean flake into recycled pellets and, where possible, into new plastic products.

CLICK ON THE LINKS FOR MORE INFORMATION:

- > www.systemiq.earth
- > <https://vinylplushealthcare.eu>
- > www.terra.coop/fr
- > www.ivv.fraunhofer.de
- > www.aimplas.net
- > www.hprc.org
- > www.ukbonn.de
- > www.tomra.com
- > <https://zuyderland.nl>
- > <https://artivion.com>
- > www.bd.com
- > <https://envetec.com>

FOLLOW OUR SOCIAL CHANNELS



Get the latest plastics industry news and analysis

Be first to know when we publish a new edition

Compounding
WORLD

Film and Sheet
EXTRUSION

Pipe and Profile
EXTRUSION

Injection
WORLD

Plastics Recycling
WORLD

www.twitter.com/PlasticsWorld

<https://uk.linkedin.com/showcase/plasticsworld>

Download these new product brochures

COPERION: RECYCLING SYSTEMS



High-quality recycled plastics. Complete system solutions from one source.

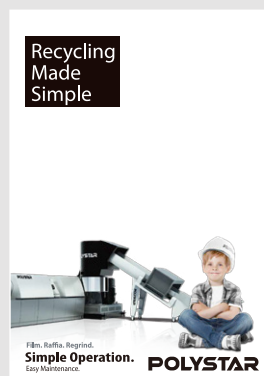
coperion
tron

coperion
technology

Whatever your recycling need - mechanical, solvent or chemical - Coperion provides a single source solution. Its offer ranges from shredding and agglomeration, through washing and conveying, on to melt processing and degassing, and pelletising.

[CLICK HERE TO DOWNLOAD](#)

POLYSTAR: PLASTICS RECYCLING



Recycling
Made
Simple

Film, Raffia, Regrind.
Simple Operation.
Easy Maintenance.

POLYSTAR

Recycling Made Simple is the brochure from Polystar where you can find information about all of the company's plastics recycling systems. Its Repro Flex lines can recycle post-industrial and post-consumer PE/PP packaging and PP raffia/woven materials.

[CLICK HERE TO DOWNLOAD](#)

GLOBAL COLORS GROUP



global
colors
MASTERBATCHES

Find out about Global Colors Group in this brochure showcasing the group companies, their vision and focus on quality, R&D, technology and sustainability. Its portfolio includes colour, white and black masterbatches.

[CLICK HERE TO DOWNLOAD](#)

BB ENGINEERING: RECYCLING SYSTEMS



BBENGINEERING
The Recycling Company

Recycling
technologies

Close the circle with rPET systems for fibers and more

BB Engineering explains in this brochure how its technologies recycle PET into fibre and pellets, covering its VacuFil recycling systems, Visco+ vacuum filter, VarioFil R/R + compact spinning lines, extruders and more.

[CLICK HERE TO DOWNLOAD](#)

NORDSON BKG: MELT DELIVERY



Polymer Processing Systems
BKG® Melt Delivery & Pelletizing Systems

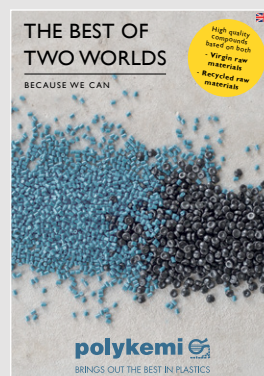
As Nordson BKG, our commitment to innovation is visible in the products we engineer. With decades of industry experience, we understand the challenges faced by global plastic processors and have tailored our melt delivery and pelletizing solutions to meet their needs with superior precision and reliability.

Nordson

The technology portfolio of Nordson BKG, part of Nordson Polymer Processing Systems, includes a full range of melt filtration systems, melt pumps, polymer valves and jet cleaners plus pelletising systems, all detailed in this brochure.

[CLICK HERE TO DOWNLOAD](#)

POLYKEMI: COMPOUNDS



THE BEST OF
TWO WORLDS
BECAUSE WE CAN

High quality compounds based on both Virgin raw materials and Recycled raw materials

polykemi
BRINGS OUT THE BEST IN PLASTICS

Polykemi's engineering compounds based on virgin and recycled materials can be used in applications ranging from housings and panels to vehicle carriers and grilles, as shown in case studies in this brochure.

[CLICK HERE TO DOWNLOAD](#)

If you would like your brochure to be included on this page, please contact Claire Bishop claire.bishop@amiplastics.com. Tel: +44 (0)1732 682948

Keep informed: read our latest editions

AMI publishes five process-specific FREE plastics industry magazines. Simply click on the cover below to read each magazine. Every edition of the magazines can be downloaded in PDF format



Plastics Recycling World November/December 2025

In Plastics Recycling World's November-December issue, materials and technology innovators are making progress in the improvement of mechanically recycled plastics in terms of colours, product quality and PET processing, as detailed in this edition's features.

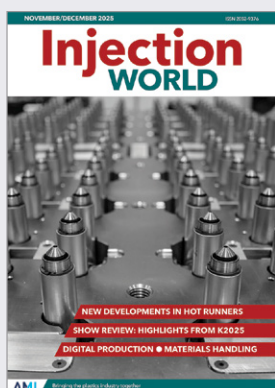
[> CLICK HERE TO VIEW](#)



Plastics Recycling World October 2025

Plastics Recycling World's October 2025 edition includes features on the latest recycling line technology, odour reduction additives and previews of exhibitors at K2025 and AMI's Plastics Recycling Expo in the US in November.

[> CLICK HERE TO VIEW](#)



Injection World November/December 2025

The November-December issue of Injection World magazine leads with the latest technologies in the hot runners sector, while other features cover digital production functionality and materials handling equipment.

[CLICK HERE TO VIEW](#)



Compounding World January/February 2026

In Compounding World January-February magazine, the response of film additives companies to PFAS pressure and other regulatory issues is explored, plus there are updates on pelletisers and electrically conductive materials.

[> CLICK HERE TO VIEW](#)



Pipe and Profile Extrusion Winter 2025

Pipe and Profile Extrusion's Winter 2025 edition has a cover feature on wood-plastic composites, and other articles on large diameter pipe, PVC additives and materials handling, plus a review of the K2025 show.

[> CLICK HERE TO VIEW](#)



Film and Sheet Extrusion January/February 2026

Film & Sheet Extrusion's January/February issue delves into the use of polyolefins in film applications, new bio-based materials, film products in healthcare and support for quality control.

[> CLICK HERE TO VIEW](#)

Take out your own FREE subscriptions to any of the magazines. Click on the logos below to simply register on-line.

Compounding
WORLD

Film and Sheet
EXTRUSION

Pipe and Profile
EXTRUSION

Injection
WORLD

Plastics Recycling
WORLD

GLOBAL EXHIBITION GUIDE

2026	4-6 March	Asiamold, Guangzhou, China	www.asiamold-china.com
	10-12 March	JEC World, Paris, France	www.jec-world.events
	11-12 March	PlastExpo Nordic, Helsinki, Finland	https://pfsptec.messukeskus.com
	26-28 March	RePlast Eurasia, Istanbul, Turkey	www.replasteurasia.com
	30 March - 1 April	Plast-Alger, Algiers, Algeria	www.plastalger.com
	31 March - 2 April	Plastics & Rubber Vietnam, Ho Chi Minh City	https://plasticsvietnam.com
	13-17 April	Wire, Dusseldorf, Germany	www.wire-tradefair.com
	21-24 April	Chinaplas, Shanghai, China	www.chinaplasonline.com
	22-23 April	PlastTeknik Nordic, Malmö, Sweden	www.plasttekniknordic.com
	29-30 April	Textiles Recycling Expo, Charlotte, NC, USA	www.textilesrecyclingexpo.com/usa
	6-8 May	RACE, Mumbai, India	www.raceexpos.com
	7-13 May	Interpack, Dusseldorf, Germany	www.interpack.com
	19-22 May	Elmia Polymer, Jönköping, Sweden	www.elmia.se/en/polymer
	2-4 June	Interplas, Birmingham, UK	www.interplasuk.com
	2-5 June	Equiplast, Barcelona, Spain	www.equiplast.com
	2-5 June	FIP, Lyon, France	www.f-i-p.com
	9-11 June	Kuteno, Bad Salzungen, Germany	www.kuteno.de
	24-25 June	Textiles Recycling Expo, Brussels, Belgium	www.textilesrecyclingexpo.com

AMI CONFERENCES

10-11 March 2026	Single-Serve Capsules, Tampa, FL, US
10-11 March 2026	Chemical Recycling, Houston, TX, US
19-21 May 2026	Polymer Sourcing, Hamburg, Germany
8-10 June 2026	Chemical Recycling, Frankfurt, Germany
9-10 June 2026	Polymers in Cables, Cleveland, OH, USA
24-25 June 2026	Flexible Pack Recycling, Milwaukee, WI, USA
14-15 July 2026	Agricultural Film, Houston, TX, USA

For information on all these events and other conferences on film, sheet, pipe and packaging applications, see www.amiplastics.com

DON'T MISS A SINGLE ISSUE

Register now for your free subscription at:
www.plasticsrecyclingworld.com

And don't forget to tell your colleagues, customers and suppliers about the magazine. You can use the share button above (the  symbol in the browser) to help spread the word.

