

Plastics Recycling WORLD



RIGID PACKAGING: PROBLEMS STILL TO SOLVE

K2025 PREVIEW: MACHINERY EXHIBITORS

SORTING TECHNOLOGY: NEW SOLUTIONS USE AI

AMI | Events

Flexible Packaging Innovation and Recycling

9-10 December 2025 | Vienna, Austria

Headline sponsor



Mitsui Chemicals
Group

Join us at our brand new industry event, featuring two conference theatres and extensive networking!

Industry-leading speakers include:



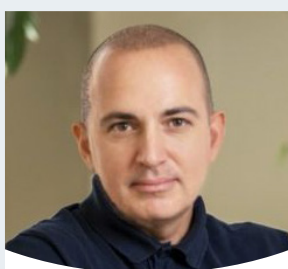
Guido Aufdemkamp
Flexible Packaging
Europe



Monica Battistella
Taghleef Industries



Nicolas Reinhardt
Constantia Flexibles



Vicken Boniekerian
Mondi



Graham Houlder
CEFLEX



Jean-Emile Potaufoux
Plastics Recyclers
Europe

Also sponsored by:



HOSOKAWA
ALPINE

kuraray

INGENIA
REDEFINING THERMOPLASTICS



*Discounts cannot be used in conjunction with other offers. Offer ends 10 October 2025

BOOK YOUR PLACE TODAY AND SAVE 15%*

Plastics Recycling WORLD

4 News

The latest news from the global plastics recycling sector



PAGE 4

11 Rigid packaging still has problems to solve

Technical and market challenges are continuing for those involved in creating circularity in rigid consumer packaging. Chris Saunders reports on initiatives trying to tackle the issues

COVER PHOTO: SHUTTERSTOCK / DARYA LAVIT

PAGE 11



21 2025 Preview: Machinery exhibitors

In this section, Plastics Recycling World previews new technologies being shown by key exhibitors at next month's K2025 show in Germany

PAGE 31



31 The development of AI for sorting plastics

James Snodgrass looks at the latest advances in sorting technology for plastics recycling, many of which involve artificial intelligence.

37 Second pass: innovations in granulators

Advances in granulators and recycling include new models for medical applications, a grinder for large injection moulded parts and a way of adding predictive maintenance.

46 Diary



PAGE 37

COMING NEXT ISSUE

➤ K2025 Show Issue ➤ Recycling Lines ➤ Additives ➤ Odour Reduction

CONTACT US

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

Head of Business Development: Paul Beckley
paul.beckley@amiplastics.com T/ +44 (0) 117 311 1529

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.

PRE warns of deepening industry crisis in Europe

Plastics Recyclers Europe (PRE) has warned that the European plastics recycling industry is “facing imminent collapse” due to the surge in low-priced imports, a consequent decrease in demand for EU-made recyclates, mounting economic pressures, and excessive red tape. It said these factors are leading a growing number of EU recyclers to close down.

PRE said in a statement that by the end of this year, the European region is expected to have lost almost 1m tonnes of recycling capacity since 2023. Forecasts for 2025 indicate zero net growth after years of rapid expansion, signalling a critical decline in momentum in the transition to a circular economy with the Netherlands, Germany, and the UK most affected.

The organisation said that to revive the industry, policymakers must implement trade and market defence mechanisms, ensure consistent EPR rules, and enforce third-party

IMAGE: SHUTTERSTOCK



certification along with harmonised penalties for non-compliant materials. Ideally, this must be paired with measures that alleviate economic pressures and reduce procedural policies.

UK recycler Biffa threw its weight behind the announcement, urging the government in the UK (which is no longer an EU member) to take decisive action to stabilise the domestic recycling sector and stressing the need for a clear and supportive legislative framework. “We [currently] have a PRN/PERN [packaging producer responsibility] system that

incentivises export over domestic processing, distorting market dynamics and investment signals,” said James McLeary, Managing Director of Biffa Polymers.

Biffa, which runs three polymer processing facilities handling a total of 165,000 tonnes/yr, proposes an overhaul of the PRN/PERN system along with UK legislation to ensure only properly reprocessed plastics are eligible for export. It also wants to raise the country’s Plastic Packaging Tax recycled content threshold.

➤ www.plasticsrecyclers.eu
➤ biffa.co.uk

China PC project for Trinseo

Trinseo has signed an agreement to launch a polycarbonate recycling project in the Zhangjiagang Free Trade Zone in China involving a total investment of approximately \$20m, with a planned Phase I production capacity of 5,000 tonnes/yr.

In a speech Han Wei, secretary of the Zhangjiagang Municipal Party Committee, stated that the project features advanced technology and significant market potential, aligning closely with Zhangjiagang’s industrial development strategy. He also expressed optimism about the prospects for future cooperation and to bring more technologies, projects, and resources to Zhangjiagang.

The city has leveraged platforms like the Yangtze River International Chemical Park to focus on key areas like functional new materials and chemicals, attracting foreign companies.

➤ www.trinseo.com

EPBP launches PET circularity tool

The European PET Bottle Platform (EPBP), an industry initiative dedicated to advancing the circular economy within the PET bottle value chain, has introduced the PET Circularity Test, a tool that simulates multiple recycling loops.

“With this new protocol, EPBP reinforces its commitment to fostering

sustainable packaging innovations that embody true circularity,” said Antoon Spiessens, co-chair of EPBP representing UNESDA.

EPBP’s Design for Recyclability Test Protocol already aligns with the EU’s Packaging and Packaging Waste Regulation (PPWR) and the Circularity Test Protocol can be seen as the next

evolution towards true circularity.

EPBP will initially offer both test protocols to applicants seeking an assessment and collaborate with relevant stakeholders to establish a transition period for the newly developed PET Circularity Protocol and its associated design guidelines.

➤ www.petcore-europe.org

Unlocking Possibilities: Moving Boundaries in Plastics

At K 2025, Coperion presents a wide range of smart technologies and process solutions for the compounding and recycling of plastics. They are based on continuous innovative strength and ensure maximum throughput, product quality and efficiency.

K 2025 · Dusseldorf, Germany

meet us!

K 2025

October 8-15

Hall 14 · Booth B19

Hall 9 · Booth B34

"The Power Of Plastics Forum"

Open Area · FG/CE07

www.coperion.com/K2025

Coperion technology brands



Re-mall wins Ingka investment

Ingka Investments, the investment arm of Ingka Group, the largest IKEA retailer, has announced an investment in Re-mall, a Chinese recycler which uses a proprietary process to produce transparent recycled polypropylene. The finished materials are used in applications such as storage boxes and containers, tableware, toys, cosmetics packaging, and woven textile products.

"Re-mall's strong supplier network and partnerships with leading Chinese food delivery service providers are already allowing them to create impact at scale for the local recycling market," said Lukas Visser, Head of Circular Investments at Ingka Group.

He said that by investing in Re-mall, Ingka is helping to address a global plastic waste problem and contributing to the circular economy transition.

➤ www.ingka.com

➤ www.re-mall.cn

Wales sets the pace in the UK with digital DRS

Wales is set to become the first country in the world to include a digital solution in its Deposit Return Scheme (DRS) using technology developed by Welsh firm Polytag.

Under the new model, households will be able to scan a QR code on containers using a dedicated app and recycle them through existing kerbside collections. The technology for a digital DRS is already operational, with Polytag's Plastic Detection Units now covering 50% of the UK's household waste stream.

The company said major retailers are already backing the scheme, with M&S launching invisible UV-tagged products using Polytag's solution.

"This is the breakthrough moment we've championed since the UK first proposed a DRS in 2018," said Polytag CEO Alice Rackley. "The Welsh Government's bold move to adopt a digital-first approach isn't just progressive, it's visionary. By



IMAGE: POLYTAG

Wales is planning to use digital technology from Polytag

putting cutting-edge technology in consumers' hands, they're making recycling smarter, simpler and more rewarding."

Wales, which according to Eunomia Research and Reloop, already has the second highest recycling rate in the world, has launched a 12-week consultation.

In a statement, the Welsh government said: "We have been undertaking widespread engagement on the development of our scheme and working closely with industry and the other governments to ensure the schemes within the UK will

be interoperable."

A new multi-agency scheme is also being trialled in Wales, aimed at increasing the collection and recycling rates of farm plastics and reducing river pollution.

A 2023 report by WRAP claimed that the UK as a whole has an average agri-plastic recycling rate of 20-30%, considered low in comparison to other European countries.

Waste silage wrap can increase flood risk as it tends to accumulate in waterways and cause blockages.

➤ www.gov.wales

➤ <https://naturalresources.wales>

Mura plans recycling facility in Singapore

UK chemical recycler Mura has announced plans to develop a 50,000 tonnes/yr plastics recycling facility in Singapore, marking a milestone in the company's expansion across Asia.

The new facility will be located on Jurong Island within the Singapore Essential Chemicals Complex (SECC), where the company has recently secured rights to a site from PCS. Mura has also opened a Singapore office to

support the expansion.

In 2019, the Singapore Government announced the Zero Waste Masterplan which aims to create a Zero Waste Nation by minimising waste and increasing the overall recycling rate to 70% by 2030.

The Singapore facility, which will have scope to increase to 100,000 tonnes/yr, will utilise Mura's Hydro-PRT technology and builds on its first

commercial-scale site in Teesside, UK.

Mura and Dow have jointly decided not to proceed with previously announced plans to build a Hydro-PRT facility at Dow's site in Böhlen, Germany, stating persistent economic and regulatory challenges that continue to impact the competitiveness of manufacturing investments.

➤ www.muratechnology.com

➤ <https://corporate.dow.com>

Veolia project in UK to recycle PET trays in closed loop

Resource management company Veolia has launched its biggest UK plastics recycling project yet with a £70m investment which will include the country's first tray-to-tray closed loop PET recycling facility in Battlefield, Shropshire.

The facility will shred, wash, and flake around 80,000 tonnes/yr of mixed plastics collected from homes and businesses across the country. Construction has already begun, with plans for the site to be operational by early 2026. The UK does not currently have a closed-loop facility to recycle PET trays into food grade materials due to the difficulty in achieving the required standards.

"This innovative facility not only

advances our commitment to reducing waste and carbon emissions but also positions us to meet the growing demand for effective recycling as Simpler Recycling legislation comes into effect, ensuring more of this material is responsibly recycled," said Estelle Brachlianoff, CEO, Veolia.

The France-headquartered group said £70m investment forms part of its broader commitment to the circular economy in the UK, with total investments set to reach around £1bn by 2030.

➤ www.veolia.co.uk

**Right: Veolia's
Hollingdean MRF
in the UK**



2025
8-15 OCTOBER
Düsseldorf, Germany

Hall 16
Stand A05



When **plastic waste** meets **recycling!**



Integrated sorting and washing technologies for a clean environment

Your trustworthy **partner for recycling** solutions

amut.it

PLASTICS RECYCLING WORLD **EXPO** NORTH AMERICA

NOVEMBER 12-13, 2025 // CLEVELAND, OH

Co-located with:



LEARN FROM INDUSTRY EXPERTS

2 DAYS, 4 THEATERS, OVER 100 SPEAKERS



BRIAN KING
EVP MARKETING
ADVANCED DRAINAGE
SYSTEMS



RICK FILIAULT
DIRECTOR
OF BUSINESS
REVOLUTION



KURT KURAZAWA
SR. DIRECTOR
PLASTICS INDUSTRY
ASSOCIATION



PUBLIC PERCEPTION OF PLASTICS RECYCLING - ARE WE DOING ENOUGH?

INDUSTRY PANEL



**NAVIGATING EPR: A BRAND AND SUPPLIER PERSPECTIVE ON PACKAGING
INNOVATION AND REGULATION**

ERIC HAIR, MARKET MANAGER, HENKEL



KEYNOTE



**ONE LARGE STEP FOR MANKIND: FROM THE STARS OF YESTERDAY TO THE
CIRCULAR FUTURE OF TOMORROW**

ADAM WOZNIAK, DIRECTOR OF SUSTAINABILITY, RAVAGO



PRESENTATION

REGISTER FOR FREE >

VIEW FULL LINE-UP >

Agilyx takes stake in GreenDot Global

Agilyx has entered an agreement to acquire 44% of packaging recycler GreenDot Global for €52m. Licensed across 29 countries, GreenDot is a major recycling platform processing more than 400,000 tonnes/yr of plastic packaging waste.

Agilyx said the investment will strengthen its presence in the European market and create a global platform for sourcing and supplying feedstock to the chemical recycling industry.

"GreenDot is the recognised industry leader in Europe, has tremendous momentum in the fast-developing advanced recycling market, and is a great complement to Agilyx's existing activities," said Ranjeet Bhatia, CEO of Agilyx.

It has also been announced that the TriPlast packaging sorting plant in Ennshafen, Austria – jointly owned by GreenDot, Altstoff Recycling Austria and Bernegger – will undergo a

€35m expansion. The new facility, to be built adjacent to the existing plant, will process up to 41,000 tonnes/yr.

Since starting operations in July 2024, the existing TriPlast facility has operated at full throughput capacity, achieving an 85% yield, said Agilyx. The plant's throughput capacity of 100,000 tonnes/yr is sufficient to process approximately 50% of Austria's annual volume of lightweight packaging.

➤ www.agilyx.com

IN BRIEF...

The **Association of Plastic Recyclers** (APR) and **Recycled Materials Association** (ReMA) have released updates to the APR Model Bale Specifications and ReMA's ISRI Specifications to serve as reference tools.

<https://plasticsrecycling.org>
www.isripecs.org

After years of development and a complex approval process, the **Tubis Group** said it is ready to launch a new pyrolysis plant in Plauen, Germany. The plant is scheduled to go into continuous operation in the third quarter of 2025.

<https://tubis-group.de>

New data published by the **Australian government** shows the total amount of plastic waste in the country has doubled since 2005 but recycling rates have not kept up, despite investments geared toward increasing capacity.

www.dcceew.gov.au

Successful start-up for Circularix

Circularix has announced the commercial start-up of a new PET recycling facility in Ocala, Florida, US, which will complement its flagship facility in Hatfield, Pennsylvania.

"From landing equipment

in mid-March to reaching full production by 1 August, this milestone is a testament to the dedication and expertise of our team," said Leon Farahnik, Founder and CEO of Circularix. "Their commitment made it

possible to bring our second facility online at unprecedented speed."

Circularix has plans to expand the Hatfield facility by taking over adjacent industrial space.

➤ <https://circularix.com>

INTEGRATED SYSTEMS FOR POLYMER PROCESSING

FOCUS ON SOLUTIONS



maag.com

We know what is important in polymer processing and we offer innovative solutions for the most demanding applications. Visit us at the K-Show and discover our latest developments in plastic processing:

From innovative pump designs and advanced filtration systems to smart pelletizing equipment and state-of-the-art quality control technologies, MAAG offers next-level solutions for your application. See you in October!

VISIT US AT K-SHOW
HALL 9 | BOOTH A02

MAAG Group
a **DOVER** company

Mark your calendars and be part of the must-attend event in your region.
Click on the date to navigate to the event website.

AMI | Events

Chemical Recycling

North America

March 10-11, 2026
Houston, TX, USA

Europe

9-10 June 2026
Europe

Ready to find out more? Contact us today: E/ suzanne.quarton@amiplastics.com T / +1 484 258 2897

AMI | Market Reports



Flexible Films

PE Consumer Packaging Films Global Market 2025

Discover film opportunities in this dynamic market

We have the key issues, drivers and trends covered:

- Influence of sustainability commitments and growing body of sustainability legislation
- Competitive threat of different polymeric film substrates and solutions
- Growing interest in new technologies for PE films including BOPE and MDO-PE
- Emerging market applications
- Intense competition and strategies adopted by companies seeking differentiation
- Volumes and opportunities for recycled PE





IMAGE: CRISP

Rigid packaging recycling still has problems to solve

Technical and market challenges are continuing for those involved in creating circularity in rigid consumer packaging. Chris Saunders reports on initiatives trying to tackle the issues

Rigid polyolefins are inherently recyclable and can be easily integrated into existing mechanical recycling streams. However, it isn't all plain sailing for polypropylene and polyethylene circularity. Closing the loop on post-consumer food packaging poses technical challenges for PP and HDPE containers as the purity standards are high if these materials are to be re-used in food-contact applications. Contamination can be caused by residues of the packaged foods or drinks, ink from the printed pack, labels and their adhesives. Uncertainty about the future for circular rigid packaging emerges not just from these technical difficulties but also from supply and demand concerns.

A recent report by **Plastics Recyclers Europe** (PRE) claims that large-scale recycling of PP and PE has largely stalled in Europe, with capacities plateauing as far back as 2023 when installed capacity for HDPE in the EU27+3 region reached 1.7m tonnes and PP reached 1.8m tonnes. These figures indicate a high level of stagnation compared to 2022, due to weaker demand amid a global oversupply, high inflation, increased energy

costs, and competition from imports. The EU Packaging and Packaging Waste Regulation (PPWR) sets ambitious recycled content targets that would require an additional 2m tonnes of HDPE and PP recycling capacity by 2030 and a further 5.7m tonnes by 2040, but there are significant concerns about how achievable these targets are.

To support further growth in EU recycling, PRE suggests a raft of actions geared towards establishing a more level playing field including limiting imported materials, adopting design-for-recycling guidelines, increasing collection rates, and deploying advanced sorting technologies. "Key challenges, including insufficient collection, unregulated imports of plastic materials, and a lack of enforcement measures, continue to hinder the expansion of the recycling industry," commented Herbert Snell, Chair of the PRE HDPE Working Group.

But there continues to be commitment to recycling in the rigid packaging value chain. Grane Maaløe, Sustainable Packaging Manager at **Arla**, the Danish-Swedish dairy products group, said: "For Arla, it is crucial to find packaging solutions

Main image:
The Crisp project, a new five-year Danish-led collaboration, aims to show that plastic from used food packaging waste can be sorted, purified and recycled into new food-grade packaging

TEXTILES RECYCLING EXPO USA

April 29-30, 2026 • Charlotte, NC

Discover the future of textiles circularity



Discover innovators
driving circularity
in textiles



Meet leading players
and expand your
professional network



Unlock expert
insights from
industry leaders

www.textilesrecyclingexpo.com/usa

Brought to you by

AMI

BOOTH BOOKINGS ARE NOW OPEN!

Spaces are filling up fast!...
Inquire today and secure your place >

that both protect our products and reduce the environmental impact. Today, we don't have access to food-grade recycled PE and PP, which limits our ability to increase the share of recycled material in our packaging."

Arla is a member of the Danish-led project, Crisp (Circular Recycling Innovation for Sustainable Packaging), running from 2025 to 2028, and supported by the Environmental Technology Development and Demonstration Programme, which aims to demonstrate that plastics including PP and PE from food packaging can be sorted, purified, and recycled into new food packaging safely, efficiently, and on a large scale. The **Danish Technological Institute** has gathered companies and organisations from the entire value chain which intend to pool their resources to develop new technologies enabling more food packaging to be recycled.

"It will be a breakthrough if we can show that Danes' used hard plastic food packaging can be collected, sorted and recycled into new food packaging. Now we have both the legislation and the partnership in place to make this a reality," said Per Sigaard Christensen, Business Manager at the Danish Technological Institute.

By the end of the project in 2028, the goal is to have established a production-ready supply chain with the capacity to handle a minimum of 10,000 tonnes of plastic annually.

The Crisp project builds on previous experiences of successfully recycling household plastic waste into cosmetic-grade packaging. "For several years, we have been working hard to improve the quality of recycled plastic. We have already proven that we can produce recycled plastic for cosmetics packaging from household plastics. Now we are taking the crucial next step towards food-grade recycling," said Franz Cuculiza, CEO of the plastic recycling company Aage Vestergaard Larsen.

To improve the quality of the recycled plastic, the project partners will further develop and demonstrate: advanced sorting technology with AI and cameras that can recognise food packaging among other plastic waste; effective cleaning methods that can remove all unwanted substances from plastic waste; new packaging designs specifically adapted to recycled plastics and research into what makes consumers accept recycled plastics in food packaging.

A bottleneck often referenced with regards to



Kautex Recruitment Notice

Position: Sales Engineer

Work Location: New Jersey, USA
Mexico City, Mexico

Requirements:

- ◆ Proficiency in English and German, or English and Spanish is required. Knowledge of Chinese is preferred.
- ◆ Strong marketing and promotion skills, excellent interpersonal communication and coordination abilities, as well as the ability to analyze and solve problems.

Job Responsibilities:

- ◆ Develop a comprehensive sales plan and sales targets based on market development and the company's strategic planning.
- ◆ Be responsible for exploring the US and the American market, developing new customers, and achieving sales targets.
- ◆ Be responsible for formulating, participating in or assisting the upper management in implementing relevant policies and systems.

Salary is negotiable!

Contact Information:

Mr. Li: salcaf@jwell.cn +86 158 0622 1799

Mr. Zhou: salbh@jwell.cn +86 136 6179 6078

Mr. Fang: saldf@jwell.cn +86 136 0190 7989



Right: The DeconWaste project led by Aimplas is focused on improving the recycling of plastic packaging and enabling its safe reuse in food contact applications

recycling rigid polyolefin packaging is contamination from packaging elements. This description doesn't just apply to labels (see below), but can be extended to inks, adhesives, binders, and pigments. These components, while functional and regarded as "safe" during the packaging's initial life, may release degradation products during the recycling process that compromise quality and safety. Enter SafeCycle, a European initiative coordinated by partners including **Fraunhofer IVV**, OFI, and FH Campus Wien. The project has won widespread praise for using modified Ames tests to assess mutagenicity in recycled plastics, revealing that certain input streams can form decomposition products during extrusion that trigger mutagenic responses. One major offender was found to be nitrocellulose binders, which are often used in ink systems.

Decontamination

The findings led **Nextloop**, the multi-stakeholder project spearheaded by **Nextek**, to develop a decontamination process that removes volatile and semi-volatile substances during melt processing and in solid state. The resulting PPristine resins, derived from post-consumer PP, have passed the modified Ames test multiple times, indicating no mutagenic risk. Complementing this, Nextek's COtooCLEAN technology uses supercritical CO₂ to extract contaminants with exceptional efficiency, offering a scalable route for high-purity recycling, it said.

In the wide-ranging Nextloop project on PP packaging, **HydroDyn** has developed advanced cleaning technology capable of removing up to 99.9% of inks, adhesives, and labels using its HydroCleaner and HydroSeparator systems, **Sorema** has perfected an effective de-inking wash process for rigid PP flake and PP films, and **Siegwerk** has made huge strides in de-inking direct-printed PP cups. In trials adhering to DIN SPEC 91496, the inks were fully removed in hot caustic wash conditions, yielding ΔE colour differences between 0.5 and 1.5, considered well within acceptable limits. Project partners say these advancements reinforce the need to align DfR principles with actual recycling processes and contamination challenges. It is no longer enough to ensure that inks and adhesives are safe in primary use; they must also be removable and inert during recycling, and participants in Nextloop are already working to meet these criteria. **Bostik**, for example, has developed next-generation wash-off adhesives for PP, HDPE, and PET labels, and **MCC Verstraete's** NextCycle IML technology enables in-mould labels to detach during size reduction and be removed by air classification.



"The sector needs clear, public data on how residual pigments and ink degradation products affect food-contact safety post-recycling," said Prof Edward Kosior, founder and CEO at Nextek. "Confidence in recycled plastics including PP hinges on transparency, consistent testing protocols, and validation at every step. If converters and brands are to commit to using recycled content, they must be assured that it meets all safety criteria. To close the loop on food-contact PP, we need collaborative innovation across the supply chain. Technologies like PPristine and COtooCLEAN show that food-grade recycled PP and polyolefins are technically achievable. But without upstream alignment, from ink manufacturers to packaging designers, these innovations will remain under-utilised."

Aimplas in Spain is leading the DeconWaste research project, which focuses on improving the recycling of plastic packaging and enabling its reuse in food contact applications. Funded by the Valencian Institute for Competitiveness and Innovation (IVACE+i) through the 2024 call for Strategic Cooperation Projects and by the European Regional Development Fund (ERDF), the project aims to research and develop new methods for cleaning and decontaminating recycled polyolefins.

"Their wide range of uses, the presence of multiple additives, and their chemical behaviour, make decontamination processes more complex," explained Adrián Morales, lead researcher in Mechanical Recycling at Aimplas. Additionally, the difficulty in distinguishing between food and non-food packaging and tracing its origin complicates subsequent processing stages. The project involves collaboration with companies and organisations which are committed to furthering sustainability and actively participating in validating the technologies.

Label problem

According to **CCL Label**, improved packaging design is essential if recycling targets are to be met as there are still a lot of sleeve labels on the market being flagged as problematic by organisations like the Association of Plastic Recyclers (APR). To help combat this, the company has extended its range of floatable polyolefin shrink sleeves that separate in the PET recycling stream, which it says offer a more sustainable option than existing materials. "EcoFloat sleeves made from low-density material are an ideal alternative," said Marika Knorr, Head of Sustainability and Communication at CCL Label. "They automatically separate from the PET flakes in the sink/float process step and float to the top of the washing tank while the heavier PET flakes sink to the bottom. This density separation leads to very clean PET flakes that can be recycled back into new bottles, closing the loop."

The standard EcoFloat sleeve is 50 microns, but a thinner 45 micron version is also available. This downgauged material is suitable for many applications and offers more efficient material usage and a lower carbon footprint. "In recent years, brand owners have gravitated towards more complex

The latest EcoFloat sleeve has a shrink rate above 70% so it works with difficult, complex bottle designs



bottle shapes," said Aaron Henneger, sales director for North America at CCL Label. "This calls for a sleeve that has a high shrink rate so it can contour to the bottle seamlessly. We have just released a new version where the shrink is well above 70%, which makes even difficult bottle shapes work with shrink sleeves."

Also new to the market is EcoFloat White technology, which enables greater recyclability for dairy packaging and other light-sensitive products. "We expect it to be a game changer," added Henneger. "The dairy industry often uses opaque

polykemi

Get Materialsmart®

Reduce your environmental footprint

The raw material you select accounts for 60–80 percent of your product's carbon footprint before it reaches the end user. This means that a smart material choice can have a major effect on your overall environmental impact.

Using our Materialsmart® concept, we calculate the carbon footprint of your current material and simulate how much you can reduce it by switching to one of our other materials. We can help you analyze your specific material and project.

Simulate your calculation here!

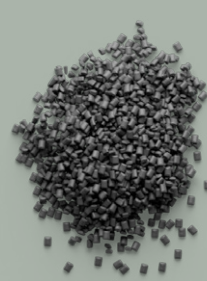


Existing material
ABS



5,2 kg*

Replacement
REZYcom ABS RN00 UV



1,69 kg*

–67%

*CO₂e/kg. The figures apply to this particular customer project. We can make a specific calculation for your component.

IMAGE: BOREALIS



Above:
Foamable
PP-based
reusable cups
from Borealis
are helping the
K2025 show
go circular

white bottles to protect products like milk, yoghurt, and probiotic drinks. However, these white bottles are rarely recycled back into food-grade applications because they contain colourants. Shifting from an opaque bottle to a clear PET bottle with an EcoFloat White shrink sleeve provides product protection and increases the amount of clear PET that can be reclaimed."

In another innovation **Taghleef Industries**, manufacturers of PP-based, biobased, and biodegradable films, recently announced the launch of Shape360 TDSW, a high-performance floatable white polyolefin TD shrink sleeve label film considered ideal for light-sensitive products. Shape360 TDSW enables the application of opaque white labels to clear PET bottles, improving print quality with its glossy finish while supporting the reuse of PET in bottle-to-bottle recycling. A key feature is its inherent floatability, achieved through its low density, which facilitates efficient separation of PO label flakes from rigid PET bottle flakes during the recycling process, resulting in cleaner recyclate and a substantial reduction in waste. Furthermore, the film is designed for high ink adhesion, preventing bleeding during recycling and ensuring optimal recyclate purity.

Diana Dedeic, Product Manager at Taghleef Industries said: "This new white polyolefin shrink sleeve film represents a significant leap in labelling innovation. Building upon our existing Shape360 portfolio, which includes clear options in 50, 45, and the recently added 42-micron thicknesses, this development underscores our dedication to fulfilling market needs for solutions optimised for recycling."

This June, leading labels company **Avery Dennison** announced the first radio-frequency identification (RFID) label to receive APR Design for Recyclability (DfR) recognition, validating its compatibility with North America's PET recycling stream. The company combined its proprietary CleanFlake adhesive technology and industry

expertise to develop the breakthrough, which resulted in a new proprietary RFID label that cleanly separates from the PET in the mechanical recycling stream, reducing contamination.

"RFID technology is essential for the effective and sustainable management of modern supply chains, supporting brands with greater inventory visibility, product traceability, and loss prevention," said Pascale Wautelet, Vice President, Global R&D and Sustainability, Avery Dennison Materials Group. "APR's recognition marks a pivotal step forward in advancing circular packaging and supporting the global transition to sustainable material use. As consumer goods companies set increasingly ambitious recycling targets, Avery Dennison remains committed to helping our customers reduce waste by investing in innovation and designing products that can be effectively recycled."

Radio frequency signals are used to read RFID-tagged items, enabling wireless communication, identification, and tracking. This helps optimise supply chain efficiency, reduce waste, and improve recovery and sortation rates. Avery Dennison, which plans to make the APR-recognised technology widely available later this year, recently opened an RFID inlays and labels production site in Pune, India, becoming the first ARC-certified company to do so.

"India represents one of the fastest growing markets for RFID adoption, and this facility underscores our commitment to being closer to our customers," said Kelvin Tan, Director APAC Intelligent Labels, Sales and Business Development. "By localising production and innovation, we're not just enhancing our responsiveness and speed-to-market, we're also partnering more deeply with Indian brands to unlock the full potential of smart supply chain solutions tailored to their needs."

Reusable cups

Polyolefins producer **Borealis** has created a comprehensive reusable cup system using modified foamable PP based on Reoil chemically recycled feedstock from OMV, which it plans to pilot at K2025 later this year. Messe Düsseldorf will use the reusable cups at all restaurants and bars during the event and make use of special collection points, marking the first time the venue has used such a system and representing a significant step towards reducing single-use plastic waste at large events. Data from the pilot scheme will help assess reuse rates, providing valuable insights.

"At Borealis, we are committed to creating innovative solutions in collaboration with our value chain partners and this initiative is a prime exam-

ple," said Peter Voortmans, Borealis Vice President Marketing Consumer Products. "Reuse systems are key to making large-scale events more sustainable, and our polypropylene solutions for foam support this by enabling lightweight, durable, and fully recyclable applications that use less material than conventional alternatives."

The proposed scheme mirrors a similar initiative launched in Glasgow, UK, at the beginning of the year. Borrow Cup, developed by environmental charity Hubbub and Glasgow-based reusable packaging systems provider **Reposit**, provides a shared system that enables consumers to borrow returnable cups from participating locations. The 12-week fact finding project involved over 40 businesses, including local cafés alongside major brands such as Costa Coffee and Burger King UK.

The PP cups were manufactured by **Berry Global** and made available in standardised 8, 12, and 16 oz sizes. These recyclable cups, which incorporate RFID chips to track usage and QR codes to provide consumers with information on the scheme, were selected due to their durability, easy-clean design, and dishwasher-safe construction. Part of Berry's B Circular Range, they feature

heat-insulating ribs to ensure comfort and stability and retain their premium quality feel even after multiple uses. The accompanying universal sip lid, also manufactured in PP, is leak-proof with a liquid-tight fit, ensuring secure transportation.

CLICK ON THE LINKS FOR MORE INFORMATION:

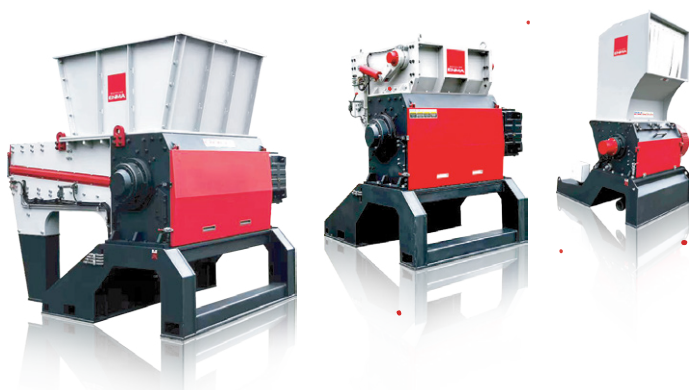
- > www.plasticsrecyclers.eu
- > www.arla.com
- > www.dti.dk
- > www.ivv.fraunhofer.de
- > www.nextloop.com
- > www.nextek.org
- > www.hydrodyn.de
- > <https://sorema.it>
- > www.siegwerk.com
- > www.bostik.com
- > <https://iml.mcclabel.com>
- > www.aimplas.net
- > <https://ccllabel.com>
- > www.ti-films.com
- > www.averydennison.com
- > www.borealisgroup.com
- > <https://reposit.world>
- > www.berryglobal.com

ENMA MACHINES- SIZE REDUCE YOUR WASTE, NOT YOUR PROFIT

Booth No.: 9C41
K 2025

The World's No. 1 Trade Fair for Plastics and Rubber
Düsseldorf, Germany, 08.10. - 15.10.2025.

 www.enma.fr





AMI Plastics World Expos

NORTH AMERICA

November 12-13, 2025 // CLEVELAND, OHIO, USA



REGISTER FOR FREE NOW >

Confirmed exhibitors include:



ADVANSIX



Brought to you by:

AMI



Co-located exhibitions:

COMPOUNDING
WORLD EXPO

POLYMER TESTING
WORLD EXPO

PLASTICS EXTRUSION
WORLD EXPO

PLASTICS RECYCLING
WORLD EXPO

**LIMITED BOOTH
SPACE REMAINS!**

SECURE YOUR BOOTH HERE >

HELLUVA
CONTAINER

HERITAGE
PLASTICS
Advancing Material Connections

HORIZON
SYSTEMS

HOSOKAWA
POLYMER SYSTEMS

ID Additives™

IMCD

INCOA
PERFORMANCE MATERIALS

Q
Q-LAB

INDUSTRIAL
MAGNETICS

innovative
RECYCLING SOLUTIONS

INTEGRATED
CONTROL
TECHNOLOGIES

JSW
JAPAN STEEL WORKS AMERICA, INC.

JEOL
Solutions for Innovation

J-TEC MATERIAL HANDLING

kaneka

K
KUHNH GROUP

Kal-Polymers
RECYCLING SINCE 1992

KIBBECHEM

KAWATA

KICE

KISUMA

Leistritz
EXTRUSION TECHNOLOGY

Zwick / Roell
Testing Systems

Kubota
Kubota Brabender Technologie GmbH

brabender
TECHNOLOGIE

KW

LAIDIG

LAWER

LIST
Kneading - Mixing - Drying

40 YEARS LUDECA
Keep it running.

WETZ
SHREDDING + COMPRESSING

LUMINA

MAAG Group
a Toray company

MAGRIS
Performance Materials

TechAmericas
SERVICE • SUPPORT • SOLVER

MAS
Plastic Processing Technology

matium

ZOLTEK
Toray Group

MERIDIAN

mesutronic
DETECTING WHAT MATTERS

METTLER
FILTRATION PRODUCTS LLC

mei
MEI KLAYING INC.

Milliken

MIXACO
USA LLC

mixron
Think smart. Mix better.

MLC
ALL MEDIA COMMUNICATION

MDI
MODERN DISPERSIONS, INC.

MoistTech Corp.

NETZSCH
Proven Excellence.

NEXAM CHEMICAL

NGR
PLASTIC RECYCLING TECHNOLOGIES

WACKER

NFM

NICHE
POLYMER

NORAC
ADDITIVES

o.a. newton

OKA

Orbetron

ORION

PALMER
HOLLAND

zimmer AMERICA
recycling solutions

Performance
Additives

PGI Plastics

pinfa
North America
Plasticizers, Stabilizers & Nitrogen Flame Retardants Association

Piovan
UnaDyn

plasomec
Excellence in Mixing

PlastiCal

Virtus
Equipment

PLASTICS
MACHINERY
GROUP

PLASTIWIN
CAPITAL EQUIPMENT

pmc

Polychem
Dispersions
INCORPORATED

polykemi

POLYSTAR
Containment

Polyvel inc.

PRET

Prime Materials

PRISM
WORLDWIDE

PROCESS CONTROL CORPORATION
Precision Extrusion and Hot Plastic Processing Technology

PrimaXX

PROTON
PRODUCTS

PSI
POLYMER SYSTEMS INC.

ORTEX

PURE LOOP
MEMBER OF BREMA GROUP

RB R&B Plastics
MACHINERY LLC

R.C. Plastics, Inc.

Recycling
Equipment Inc.
NORTH CAROLINA • TEXAS

REELPOWER
INDUSTRIAL

Reliance
Mixers.com

WELSET
Innovation in Compounding

TOYOTA TSUSHO
AMERICA, INC.

TRENDELKAMP

UniBROM

USE
EXTRUDERS

UWAY
OOO

VAN DYK
recycling solutions

vartega

Vecoplan

x-rite

XALOY

ZEPPELIN
WE CREATE SOLUTIONS

ZERMA

and many more. See the full list of exhibitors [here](#).

Proudly supported by:

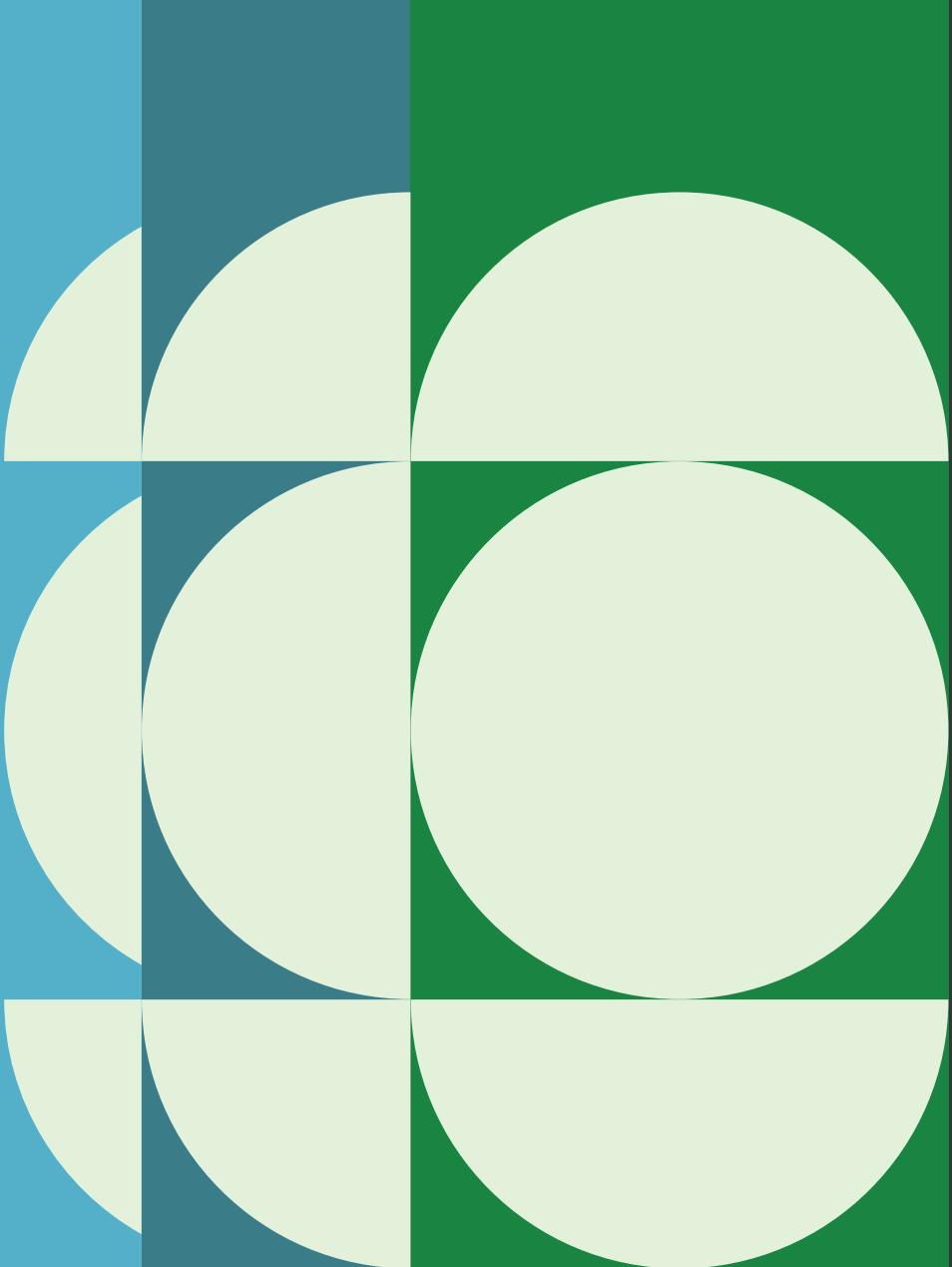
Compounding
WORLD

Film and Sheet
EXTRUSION

Pipe and Profile
EXTRUSION

Plastics Recycling
WORLD

Injection
WORLD



E25

The Ecosystem of the Ecological Transition

NOVEMBER
4 — 7, 2025

RIMINI
EXPO CENTRE
Italy

ECOMONDO

The green technology expo.

Organized by

ITALIAN EXHIBITION GROUP
Providing the future

In collaboration with



ITA®
ITALIAN TRADE GUILD

madeinitaly.gov.it



GET
YOUR
FREE
TICKET



Recyclers' guide to 2025

Machinery and equipment

The latest edition of the K show runs from 8 to 15 October 2025 in Düsseldorf, Germany. This edition's theme is: The Power of Plastics! Green - Smart - Responsible, reflecting the industry's values and targets. The last event in 2022 was attended by 3,020 exhibitors from 59 nations and visitors from 167 countries. Particularly well represented were exhibitors from Europe, Asia, and the US, with a total of 71% of visitors hailing from outside Germany.

K2025 looks set to follow a similar pattern, with 177,000 m² of exhibition space across 18 halls already booked and Europe once again strongly represented. The fair also reflects changes in the global market with the number of companies from Asia, particularly China, India, and Taiwan, remaining at a consistently high level.

As in previous iterations, the organiser Messe Düsseldorf has lined up some special features to attract certain demographic audiences. Among the highlights promises to be the Start-up Zone, which successfully debuted in 2022 and will once again provide a platform for newcomers to the industry, and the return of the Science Campus where universities,

colleges, and institutes, can present their latest research findings.

New for K2025 will be the addition of a Women in Plastics networking event featuring panel discussions and talks, and a Young Talents Lounge which aims to help address the well-documented recruitment problems in the industry.

In this exhibitor preview, *Plastics Recycling World* focuses on major machinery and equipment companies that serve the recycling sector. In the next issue, the K2025 preview will highlight materials and additives companies exhibiting at the fair.

Messe Düsseldorf says the plastics industry has faced a "global crisis" since K2022. In response, it says K2025 will showcase a "plethora of new and further technological developments" - as digitalisation and artificial intelligence (AI) emerge as key themes. Connected machines have been available on the market for several years, providing a large volume of process data. The EU Data Act has provided clarity for industry, as it obliges machine manufacturers to make data generated during operation available to the machine user in a simple and comprehensible

machine-readable form.

The advantages of connected machines using OPC UA standards are also increasingly being recognised by customers. This development is being given a boost by AI - with several solutions and products expected at K2025. Examples include: automatic design and process optimisation; predictive maintenance; and optical quality control.

If you are planning to attend the show but are yet to finalise your travel and accommodation, it is not too late. But you should act fast. There are some useful weblinks at the foot of this page and plenty more in the '[First Look](#)' article in the August issue of *Plastics Recycling World*.

The *Plastics Recycling World* editorial team will be at K2025 and will be gathering information for our post-event coverage later this year. We will also be reporting on the latest news and innovations as they happen via our @PlasticsWorld feed on X.

Dates: 8-15 October 2025

Venue: Dusseldorf Fairground, Dusseldorf, Germany

Hours: 10:00 to 18:30 daily

Advance tickets: One-day €60, three-day €125.

Note: ticket price no longer includes free local transport

Organiser: Messe Dusseldorf

Website: www.k-online.de

Use the following links to go direct to essential show information:

- [K2025 hotel booking](#)
- [K2025 online ticket purchase](#)
- [K2025 exhibitor search](#)
- [K2025 iOS/Android apps](#)



At K2025, the focus for **Amandus Kahl** will be on dust-free pelleting of additives and processing plastic waste for chemical recycling. On its stand, the specialist for process and plant engineering will present its flat die pellet mills and demonstrate how powdery materials and temperature-sensitive plastic fractions that are generated after production or end use can be converted into dimensionally stable pellets in an energy-efficient, gentle manner.

The company will also focus on plastic waste recycling. Its larger pellet mills, such as the 39-1000 and 45-1250, prepare large-volume, inhomogeneous, and temperature-sensitive plastic waste for further recycling by significantly increasing the bulk density and ensuring a consistent pellet shape. This makes the material easier to handle and more efficient to process in an extruder, while also reducing transport and storage costs. Additionally, the Kahl belt dryer reduces and homogenizes moisture in the product before it is pelleted, ensuring stable process conditions.

➤ www.akahl.com

Amut says its bottle-to-packaging lines are designed to process 100% post-consumer PET bottle flakes into certified food grade thermoforming foil, FDA and EFSA approved. The lines are designed with a net width from 1,000 to 2,000 mm configuration with one layer, three layers or up to five layers, upon request. The thickness ranges from 0.15 to 2 mm, and the output is up to 2,000 kg/h.

➤ www.amut.it

Bausano has developed the E-GO R series of extrusion and repelletising technologies for the recycling of polyolefins, such as HDPE, LDPE, and PP, derived from industrial and post-consumer waste. The E-GO R extruders, ranging from 45/37 to 210/37 L/D, can process up to 1,500-1,800 kg/hr of non-free-flowing material and 1,700-2,000 kg/hr of free-flowing material.

The company says E-GO R extruders are ideal for recycling lightweight materials with a moisture content of 5-6%. Thanks to a high-performance double degassing system, residual moisture and volatile substances are removed during the process, thus preventing the formation of defects in the pellets.

Bausano says innovation will take centre stage with two live demos on its stand. Visitors will have the opportunity to interact directly with the AI-based Bausano Ranger interface, one of the suite's core modules, installed on two high-performance extruders: a counter-rotating twin-screw MD 130/25 for compound production; and a single-

screw E-GO 60/37 for multilayer HDPE pipe manufacturing.

➤ www.bausano.com

Buss, the Swiss developer of co-kneader technology, produces the Compeo series of machines for polymer compounding. These machines have a modular structure which can be precisely configured to meet the specific compounding application. Maintenance outlay is kept low by using highly resistant surface-hardened materials in the process zone. Different machine sizes mean that throughputs can be achieved in low, medium and high ranges.

The Compeo Lab is a versatile laboratory and pilot compounding line for development, process optimization and small production runs. It is suitable for a wide range of applications, from shear-sensitive materials to demanding engineering plastics. This user-friendly laboratory compounder rounds off the Compeo series with throughputs of 50-100 kg/h at the lower end.

➤ www.busscorp.com

BBE will be appearing together with its parent company Barmag and associated brands, showcasing its expertise in extrusion, filtration, and integrated recycling solutions. A highlight promises to be the open house event at the BBE Technical Centre, which will feature a team of experts and live demonstrations showing PET waste being recycled on the test facilities and spun directly into high-quality recycled yarn (POY) which is then further processed using BBE's JeTex air texturizing system with a new auto-doffing unit.

Also on display will be the latest Cobra filter, which enables continuous uninterrupted operation with consistently high filtration quality, and a VacuFil fully integrated system for PET recycling via liquid-state polycondensation, which combines large-area, gentle melt filtration with precise IV control, ensuring consistently high melt quality. With a capacity of 150-4,000 kg/h, the modular concept allows flexible adaptation to different material qualities and areas of application.

The central component of the system is Visco+, the liquid-state polycondensation unit for targeted viscosity adjustment. Continuous adjustment of the IV results in a homogeneous melt with optimal processing properties making it ideal for high-quality end products in the fibre, film, or packaging industries.

<https://bbeng.de>

CMG Granulators says its technologies are developed to ensure maximum cleanliness, consist-



ent quality and repeatable performance. Each process step is designed to optimize the transformation of plastics, even in their most contaminated and complex forms, into materials that are useful, sustainable and efficient again.

CMG's EV Evolution Series granulation systems have been engineered specifically for post-consumer plastics. Each model is optimized to reduce energy utilization by up to 50% compared to conventional granulators, achieved through advanced cutting geometries, unique rotor design, and intelligent drive systems. This year's highlight at K2025 is the global debut of the EV 92-220 model, which CMG claims is the largest and most powerful granulator ever introduced in the industry and is designed for heavy-duty applications and massive volume streams.

CMG is introducing a new range of evacuation, dedusting and powder containment system solutions. The Regrind Evac Systems start at a capacity of 200 kg/h and, through a selection of 10 different sizes, reaches top capacity of 7,000 kg/h. All new system solutions supplied by CMG will be equipped with the new Evac Systems, which are also offered as upgrade kits for retrofitting to granulators.

The company's other products at K2025 include: the new G55 granulator line for high-capacity applications, starting from 700 kg/h all the way up to 1,300 kg/h; the new GT series for in-line scrap recycling, suitable for sheet, skeletal sheet and

reject parts grinding; the ET2 configuration applicable to a vast range of models to recycle the trimmings from the extrusion line at the of them.

➤ www.cmg-granulators.com

Coperion and Herbold Meckesheim will be showing their recycling technologies at several locations at K2025. At Booth 9B34 in Hall 9, the focus will

be on Herbold Meckesheim's technologies for mechanical processing of plastics waste. On display will be the new T 150-300 Mechanical Dryer and the SMS 80-200 Granulator. The high-capacity dryer can achieve throughputs of up to 2.5 tonnes/hr of film or more than 10 tonnes/hr of PET or rigid flakes. The dryer features a fully redesigned construction, including a

rotating sieve basket with integrated water spray nozzles for full-coverage cleaning and a centrifugal drying chamber for rapid moisture removal.

The SMS 80-200 Granulator, designed for demanding recycling processes, integrates energy-efficient double cross-cutting action and pre-adjustable rotor and bed knives to produce a high-quality regrind with

SOLUTIONS BEYOND TOMORROW

For a closed loop: Recycling solutions made by Krones

It's important to look beyond tomorrow, which is why Krones regards plastic waste as a valuable resource and is working on recycling innovations that contribute to steadily advancing the circular economy round the globe.

**K 2025, Düsseldorf, 8 – 15 October
Hall 9, Stand C29**

krones.com

KRONES
RECYCLING



Above:
Herbold
Meckesheim
T 150-300
Mechanical
Dryer

minimal fines and consistent particle size distribution.

In the Open Area, Pavilion FG/CE07, visitors can see a demonstration of various Coperion recycling technologies: a Herbold Meckesheim Hydrocyclone Stage, the ZSK FilCo filtration compounder, the ZS-B MEGAfeed side feeder, a Coperion K-Tron K3-V200 vibratory feeder, an S60 single screw feeder and the MechaTron flat bottom feeder. Also on display will be a mobile deodorization unit.

The ZSK FilCo filtration compounder enables recyclate filtering and subsequent compounding in one step. The ZS-B MEGAfeed side feeder is for recycled materials with a bulk density as low as 20 kg/m³. This allows for recycling and compounding of lightweight, high-volume fibers and flakes at high throughputs.

The group particularly highlights that the Hydrocyclone Stage and the ZSK FilCo filtration compounder demonstrate how integrated Herbold and Coperion process modules produce high-quality recyclates. This combination ensures the highest levels of purity and efficiency, meeting the stringent end product quality standards, it says.

➤ www.coperion.com

Granulator and shredder technology company **EnMa** will show two models of the EnMa C series crushers and EnMa G series granulator at the K2025 show. The modular model design and super cutting system reduce costs in the recycling process, it says. Among the company's other

products are: the EnMa P series large diameter pipe shredder recycling line, for shredding pipes up to a maximum diameter of 2,000 mm; the PE hollow barrels recycling system, with crushing output up to 3,000 kg/hr.

➤ <https://enma.fr>

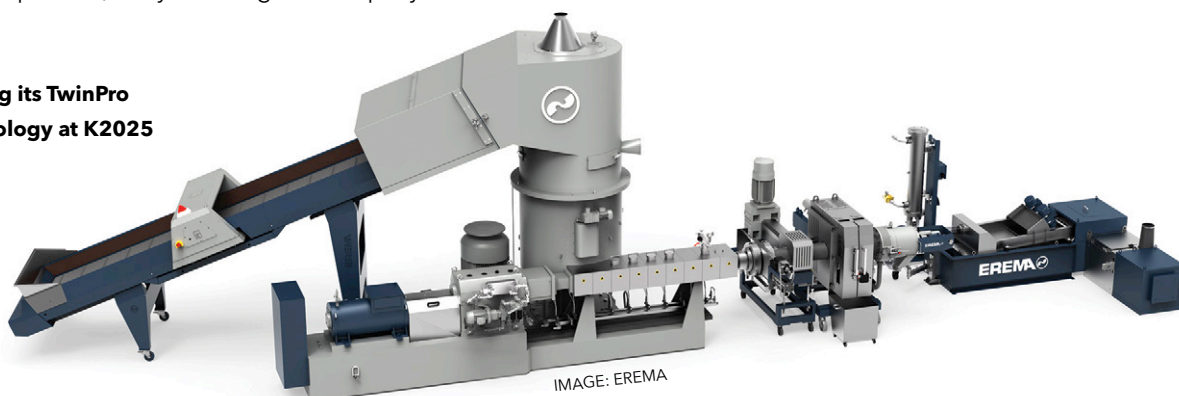
Erema is launching two new machine types at K2025. The TwinPro is a high-performance twin-screw technology featuring the company's Preconditioning Unit (PCU) directly coupled to a twin-screw extruder. The new system is particularly suitable for the highly efficient homogenization of complex film waste with low bulk densities in a single process step. The other machine type is the Agglorema for processing in chemical recycling. This robust and energy-efficient system produces agglomerates with a high bulk density on a large scale from heavily contaminated post-consumer material.

With its partner Lindner Washtech, Erema will demonstrate the optimal coordination between a Lindner washing system and new Intarema TVEplus 2021 extruder in an outdoor pavilion. The two companies will highlight progress in the Blueone Solutions joint venture, which they set up in 2023. The extruder has been developed as a compact unit without cascade. At the K show, Erema will launch the Intarema 2021 TVEplus with a diameter of 2 m for the PCU and 212 mm for the extruder screw, which for the first time features a single end-to-end extrusion unit. With a throughput of up to 3.5 tonnes per hour and a footprint of just 15.1 x 3 metres, this recycling system is over 2 m than the previous cascade design, in which two extruders were connected by a melt pipe. The new design also reduces the melt temperature, lowers energy consumption and minimises maintenance requirements.

New for K2025, Erema's PredictOn family is expanding to include AI-supported in-depth data analysis for monitoring the main drives and a new condition monitoring system for the plasticizing unit.

➤ www.erema.com

Erema is launching its TwinPro
twin-screw technology at K2025





Designer and manufacturer of compounding systems **Farrel Pomini** will exhibit alongside its parent company, HF Group. The stand will feature a range of technologies and demonstrations showcasing how both companies are advancing sustainable solutions, and will include the CPeX Laboratory Compact Processor, a lab-scale processor utilising Farrel Pomini's proven continuous mixing technology.

A Farrel Continuous Mixer recycling station features a video presentation of the company's complete solution, including a large feed hopper for ingestion of irregularly shaped material, crammer options for low bulk density feeding, proprietary hard surface coatings for maximum wear, a patent-pending grooved mixer feed section and a vent capture system.

➤ www.farrel-pomini.com

German filtration specialist **Gneuss** will present the RSFgenius 330L, one of the largest screen changers



in its flagship RSFgenius series with an active filtration area of 2,150 cm².

The company says the RSFgenius series offers reliable filtration performance even with highly contaminated recycling materials and sensitive applications, and ensures a steady melt pressure even when processing recycled material thanks to its highly-efficient, automatic, integrated self-cleaning system.

Three further Gneuss screen changer ranges will be represented; the SFXmagnus, SFneos and KSF. The SFXmagnus is a process-constant screen changer for a wide range of applications, the SFneos is a more specialised screen changer which offers an extremely high level of process and pressure-stability enabling it to cover a huge range of applications where self-cleaning is not necessarily required, while the KSF range is process-constant and designed with extremely sensitive polymers in mind. It is mostly used in compound-

Left: Gneuss will present the RSFgenius 330L melt filtration system



THE ART OF PET RECYCLING

RECYCLING LINE recoSTAR PET art



In full Austrian tradition, Starlinger recycling technology has created a PET recycling line that raises bottle-to-bottle recycling to the next level.

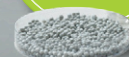
recycling.starlinger.com

Visit us at:

Drinktec | Hall C6 Booth 321
Munich | DE
September 15th - 19th 2025

K 2025 | H9 A28
Düsseldorf | DE
October, 8th - 15th 2025

FDA, EFSA &
Brand Owner
compliant





Above: The IR-Clean system from Kreyenborg

ing where its uniquely customisable design for fast material and grade changes is a major advantage.

➤ www.gneuss.com

Fraunhofer IVV Institute for Process Engineering and Packaging is demonstrating how plastics can be successfully recovered from complex plastic mixtures at the K trade fair. With the solvent-based recycling process developed at Fraunhofer IVV, a wide variety of plastics from packaging, but also from the automotive, electronics, construction and textile sectors, can be recycled and processed into high-purity plastic recyclates.

"Plastics from old electrical appliances that cannot be recycled today, as the plastic content in electronic waste contains many different types of plastic and additional hazardous substances such as flame retardants, can be recovered free of harmful substances using our process," said Dr. Andreas Mäurer.

At the special "Plastics Shape the Future" feature, Prof. Dr. Andrea Büttner, Head of Fraunhofer IVV and Member of the Board of Management of Fraunhofer CCPE, will give a presentation entitled "Digitalization, modelling and AI: How much of it is needed in the material world?" on 11 October at the Plastics Europe booth in Hall 6/C40.

➤ www.ivv.fraunhofer.de

Kiefel is presenting the Speedformer KTR 6.2 Speed tilting thermoforming machine at K2025, which optimizes both material consumption and line performance. The machine produces high-quality cups, from a range of materials including recycled PET. Various rPET materials were tested in advance in close collaboration with film partner Coexpan. At the Kiefel booth, visitors will gain exclusive insights into test results.

➤ www.kiefel.com

In the PET recycling sector, **KraussMaffei Extrusion** is using K2025 to show a high-performance twin-screw system based on the BluePower series for throughputs of up to 12 tonnes/hr. The concept responds to the increasing demand for higher output and more energy- and cost-efficient processing. Compared to conventional twin-screw systems, energy consumption can be reduced by up to 20%. The systems are compatible with standard SSP units and produce food-grade rPET.

In chemical recycling, the company is focusing on key technologies: high-performance extruders for processing material streams – for example, to produce pyrolysis oils – efficiently implement crucial process steps such as dewatering, degassing and the removal of impurities. Pressures of up to 200 bar and the retractable UltraGlide system with easy-to-maintain screws enable customized solutions for demanding recycling applications.

KraussMaffei Extrusion has also refined its EdelweissTechnology for processing recyclates more efficiently, even with fluctuating material properties. The twin-screw extruder covers all process steps: degassing, filtering and compounding.

With its newly developed PVC multilayer pipehead, KraussMaffei Extrusion is demonstrating how pipe and profile extrusion can be made more sustainable and future-proof. The system processes up to 100% recycled PVC, even with varying material quality. The layer configuration can be flexibly adjusted depending on the application. A newly designed flow system prevents spiderlines and ensures consistent product quality with optimal material usage.

➤ www.kraussmaffei.com

Kreyenborg is presenting infrared technology at K2025 with a new control system, storage, and feeding systems, recycling solutions, and retrofit solutions for energy-saving. It is demonstrating both a continuous system and a batch version of its infrared rotary drum (IRD) at the K fair. To demonstrate the IRD a large monitor that provides a view into the interior, shows how the material in the rotating drum behaves under infrared light.

For recycling post-consumer PET flakes the company has developed the IR-Clean system in addition to the IRD's classic crystallization and drying. In this system, rPET flakes are heated from the inside to the outside in just a few minutes. The decontamination performance of the IR-Clean achieves a cleaning efficiency of over 95%, says Kreyenborg, meeting EFSA and FDA criteria and up to 100% of the treated material can then be used for food packaging.



Kreyenborg is also showing its IR-Fresh system for deodorizing regrind before or after the extrusion process. It has entered a collaboration with NGR on development of technology for reducing odours and emissions.

➤ www.kreyenborg.com

Leistritz and **Next Generation Recyclingmaschinen (NGR)** have announced a cooperation agreement and will present their collaboration at K2025. The partnership combines the two companies' strengths: NGR as a global supplier of highly efficient and innovative plastics recycling systems for polyolefins, PET, and technical plastics; and Leistritz is one of the world's leading manufacturers of twin-screw extruders and turnkey extrusion lines for compounding. They are developing a process solution that enables recycling and compounding in a single step with only one melting process.

The companies said a joint recycling and compounding system installed at the NGR Test Centre in Feldkirchen an der Donau, Austria, allows the efficiency of the cooperation to be demonstrated at any time. The system is designed for approximately 300-500 kg/hr and is available for customer trials.

➤ www.leistritz.com

➤ www.ngr-world.com

Lindner is launching the fourth-generation Micromat shredders at K2025. It says it has built on the proven strengths of Series 3, adding upgrades that improve both

www.plasticsrecyclingworld.com

maintenance and productivity. The core of the new shredder series is the innovative drive concept that features a high level of efficiency of above 97%. Unlike a torque drive, the new concept operates without any rare earth elements and has a long lifespan. Another highlight is the flexible, configurable blade system. This makes it possible to quickly replace

pointed knives with step knives, which enables the shredder to flexibly adapt to different material requirements.

Lindner Washtech is highlighting its joint venture with Erema (see above). A jointly developed model by Lindner Washtech and Erema makes it possible to precisely design a plant according to the required total throughput, taking into

account the specific output and materials from the raw material to the final recycle. At K2025, the partners will focus on key themes such as integrated plant concepts, smooth material flow regulation, smart monitoring and data-driven, intelligent control systems for maximum process control and optimisation.

➤ www.lindner.com

➤ www.lindner-washtech.com ➤

Reduce Color and Additive Costs with ColorSave® 1000 Gravimetric Feeder



- Patented SmartClean technology for faster material changeovers
- Optimizes masterbatch use

Click here for more information

AMPACET
Plastics Reimagined™



The **Maag Group** says it will unveil a host of innovative technologies centred around integrated system solutions in pelletising, extrusion, filtration, and recycling, as well as measurement and control. Among the exhibits will be the new Pearlo CS compact pelletising system which comes in two sizes each featuring a tangential cutting chamber and optimised cutter design. Elsewhere, the next generation NG-USG underwater strand pelletising system enables greater throughput and superior pellet quality whilst boasting additional sensors to boost process stability, and the semi-automated EBG dust-reducing dry cut strand pelletising system offers flexible process control with reduced strand breaks, low moisture content, and minimised dust formation.

The company will also show BRF and ERF double-stage melt filtration for recycling. As the BRF coarse melt filter enhances downstream equipment protection and ensures stable operation, the ERF fine filter guarantees exceptional pellet quality with minimal material loss. Combined, these filters offer a powerful combination for efficient, low-cost recycling solutions, it says.

➤ <https://maag.com>

MachinePoint is a leading company for buying and selling used machinery in the plastics and beverage industries. It focuses on used machinery for film extrusion and converting, flexographic printing, thermoforming, sheet extrusion, injection moulding, blow moulding, and plastics recycling. The machinery brands it works with include: Erema, NGR, Comexi, Windmüller & Hölscher, Reifenhäuser, Nordmeccanica, Engel, Arburg, SML, Macchi, Bobst, Bausano, and Battenfeld-Cincinnati among others. Machines for the compounding sector are from leading brands such as Leistritz, Coperion, Krauss Maffei and more.

➤ www.machinepoint.com

MEAF Machines will launch its new Xtender technology at K2025 for use in the production of recycled PET film and sheet. This polymer melt co-processing technology, with exceptional mixing and degassing properties, was developed by MEAF in collaboration with an Italian partner and increases the IV value of rPET using a patented liquid state polycondensation process. The Xtender technology can be retrofitted on both single-screw and twin screw extruders, where it is located

TRAY-TO-TRAY

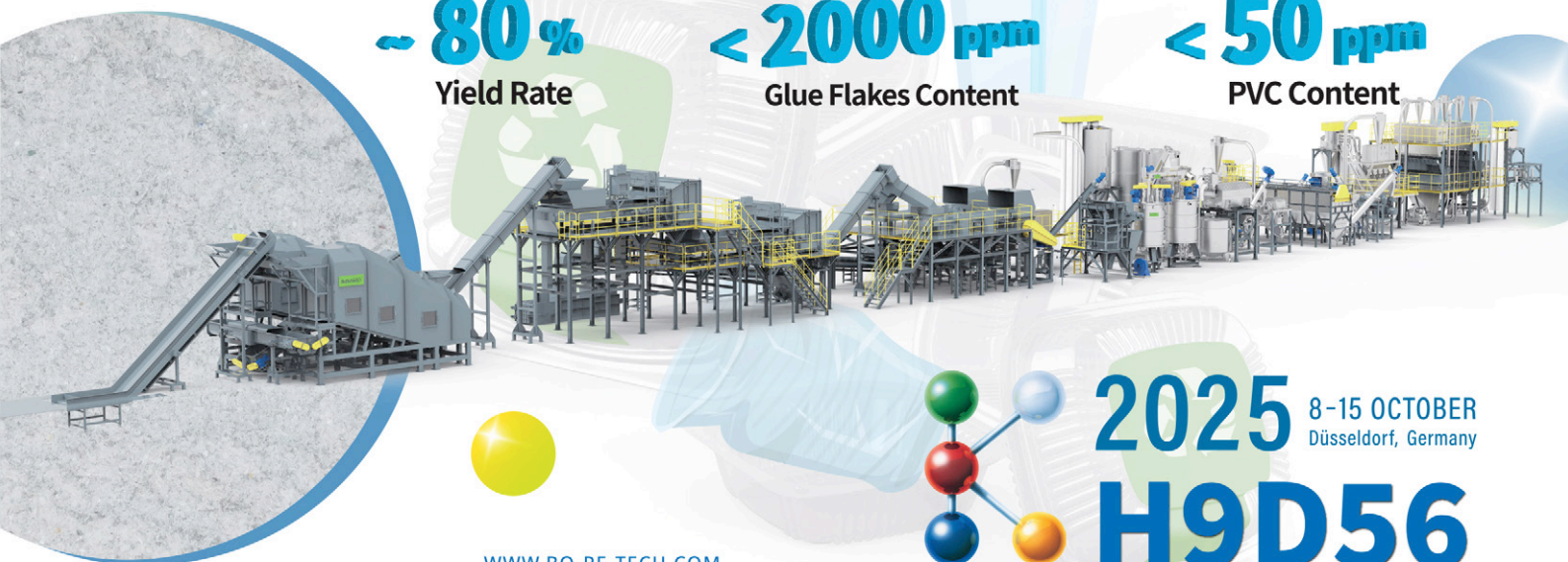
PET / PP TRAY WASHING TECHNOLOGY

BoReTech
Plastic Recycling Solution

~ **80 %**
Yield Rate

< **2000 ppm**
Glue Flakes Content

< **50 ppm**
PVC Content



WWW.BO-RE-TECH.COM
SALES@BO-RE-TECH.COM



2025 8-15 OCTOBER
Düsseldorf, Germany
H9D56



directly downstream of the extruder.

MEAF says the Xtender technology was developed with its core manufacturing values in mind, providing a cost-effective solution that can be modularly integrated into new and existing extrusion lines for both recycling as well as film and sheet production.

➤ www.meaf.com

MoistTech manufactures moisture measurement technology for use in plastics processing and other industries. The company's IR3000 series of near-infrared (NIR) sensors are used for real-time, non-contact moisture measurement to help processors ensure consistent product quality, reduce waste, and improve overall efficiency by precisely controlling moisture levels in plastic materials during various stages of production. The benefits include: preventing degradation; optimizing drying processes, reducing energy consumption and waste; and enhancing product quality. MoistTech's NIR technology is used in the processing of plastic pellets and the production of plastic films where moisture fluctuations can cause variations in film thickness.

➤ www.moisttech.com

With its new Swift product series, **Motan** says it is introducing cost-effective solutions across the board for auxiliary equipment in materials management with its range of standardised units specially developed for companies looking to economise whilst not compromising on efficiency, reliability, or ease of use.

The Swift series covers the entire product range for materials handling, from dosing and mixing to drying and conveying, highlights to be displayed at K include the sDRY 40/80, a flexible and compact dehumidified air dryer range, the sCOMPACT, a flexible dehumidified air dryer with integrated conveying and optional control of an additive dosing unit, the sCONVEY HES, a compact single-phase material loader for granulates with intelligent control, and the sCOLOR V additive dosing and mixing unit.

➤ www.motan-group.com

Nordson BKG and **Fimic** will unveil a new collaborative innovation which combines their respective expertise to tackle key challenges in plastics recycling: melt filtration, pelletizing, and system integration. The result is a set of comprehensive solutions that set new standards ecologically and economically, the partners say. Visitors to Hall 9 will find the two partners at opposite booths allowing



IMAGE: SIKORA

them to explore the entire process chain.

➤ www.nordsonpolymerprocessing.com

➤ www.fimic.it

Qlar (formerly Schenck Process) will demonstrate how different materials can be dosed reliably and continuously with the Simplex FB loss-in-weight feeder to ensure an efficient and smooth process flow. Thanks to the bottom-driven agitator and the low centre of gravity, even regrinds or plastic flakes can be processed while the integrated sensor system allows data to be collected and transmitted in real time. The intelligent system enables fill level measurement and bridge detection as well as moisture measurement of the material, and blockages in the discharge are recognised at an early stage. Depending on the speed and filling level, optimum operating values for different materials can be readily determined, laying the foundation for long-term process optimisation.

➤ [www.qlar.com](http://www qlar.com)

Sikora is presenting a large number of measuring and sorting technologies at K2025. Among these is its Purity Scanner Advanced, a flexibly configurable inspection and sorting system. In addition to high-resolution optical cameras, which detect black specks from 25 µm, for example, an X-ray camera is also available as an option, especially for detecting metal particles in the pellets. With the three-camera system, customers can define which types of contamination are tolerable, for example small, light-coloured black specks, and sort them out with a smaller blow-out unit.

Sikora's Purity Concept V system inspects pellets or test plates for optical impurities such as black specks within a few seconds. The system detects, visualizes and records even the smallest contamination and provides a comprehensive statistical evaluation, automated and reproducible. Live

Above: Sikora's Purity Concept V inspection system

material tests with the Purity Concept V will be carried out at the Sikora booth. Visitors can bring small quantities of pellets or test plates and put their material to the test free of charge.

In pipe extrusion, Sikora is showing new measurement products, including the Centerwave 6000/1600, an expansion of its proven radar technology for non-contact online measurement of wall thickness, centering, diameter, inner profile and ovality over the entire circumference of plastic pipes. Also being displayed is a measuring system for small dimensions: Centerwave 6000/250 measures tubes and pipes from 32 to 250 mm in diameter.

The X-Ray 6000 Pro C-PipeAI is a development for measuring corrugated pipes (DWC) using AI.

➤ www.sikora.net

The **Sorema** division of Italy-based Previero will showcase its latest advancements in the mechanical and chemical recycling of post-industrial and post-consumer plastics. Some of these innovations were developed using the company's pilot washing plant in Alzate Brianza, near Como, which is equipped with de-inking technology for processing flexible and rigid packaging.

These plants can process heavily printed LDPE films to produce high-quality recycled raw materials for packaging films containing a high percentage of recycled material. Sorema says the system offers flexible production capacity and cost-effective chemical formulations, which are essential given the variety of formulations in the ink industry. The de-inking process involves hot washing using batch reactors and a water filtration system. The control system reduces water and chemical consumption while ensuring precise control of treatment times, material friction, and chemical concentration.

➤ <https://sorema.it>

Starlinger Recycling Technology is presenting its new RecoSTAR Dynamic Art recycling system at K2025. The system has increased throughput for recycling plastics, such as film waste from the food and agricultural sectors, fibres, and foamed plastics.

Optimizing the components of the system, Starlinger says it has increased production output and system efficiency significantly. The system's SMARTfeeder has been made larger and uses more powerful drive motors with a low energy class. The company said it has also significantly simplified and shortened machine maintenance. Together with the optionally available StarLOGGER software, which ensures accurate data recording,

and Starlinger's "Dynamic Automation Package plus" which now features a convenient automatic on/off function, the new system is easier and more user-friendly to operate.

Starlinger's RecoSTAR Dynamic Art recycling systems are particularly suitable for heavily contaminated post-consumer plastic waste that has a high moisture content due to storage or after washing.

Special features of the new recycling systems include the spin-feed technology and the Dynamic Automation Package. 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, according to Starlinger.

A new underwater pelletizing unit, which Starlinger will present for the first time at K2025, can be integrated into the highly automated production process.

Bottle-to-bottle recycling is Starlinger's second focus at the trade fair. The machines of the RecoSTAR PET Art series consume 25% less energy and have a 15% higher output compared to the previous model, said the company. With the newly added extruder size of 265 mm, they cover a throughput range from 1,000 kg/h to 4,500 kg/h.

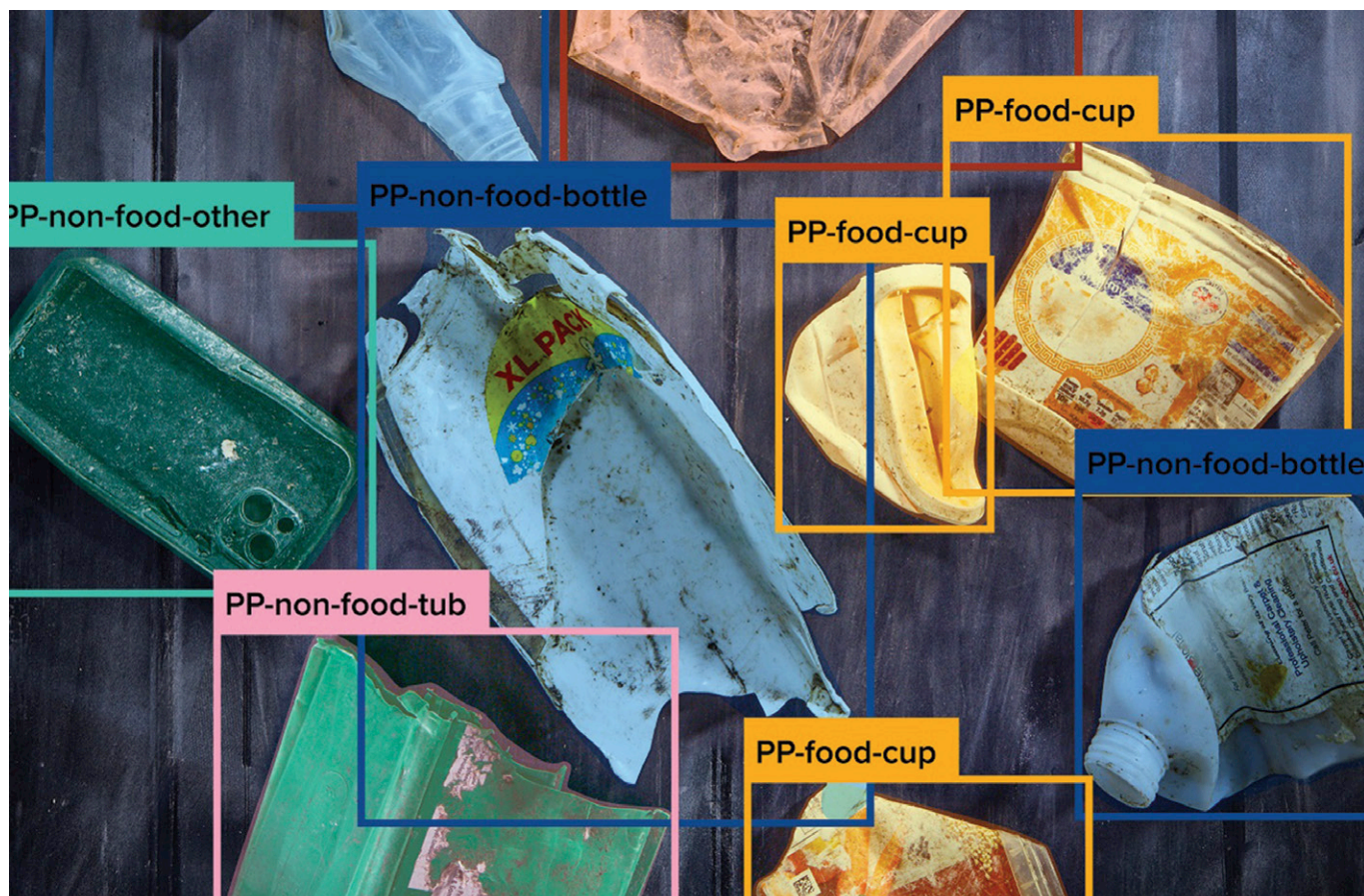
➤ www.starlinger.com/en/recycling-technology

In addition to its K2025 stand, optical sorting technology group **Steinert** is organising two site tours while the show is running. At the Steinert Test & Development Centre near Cologne, experts will demonstrate the AI-supported sorting programme Intelligent Object Identifier (IOI), which the company's UniSort PR Evo 5.0 uses to separate food-grade packaging from other plastic packaging, as well as precise flake sorting down to 0.5 mm with MSort AK. Participants will also have the opportunity to talk directly to their contact persons about specific projects and technical details.

On 10 October, a joint tour with the VDMA association will take visitors to the sorting plant of Remondis subsidiary RE Plano in Bochum, which Steinert says is one of the most modern sorting plants for lightweight plastic packaging in Europe. Sensor and magnetic technologies from Steinert are used at the plant to stream pre-sorted packaging materials into recyclable plastics.

➤ <https://steinertglobal.com>

IMAGE: TOMRA



The development of AI for sorting recycled plastics

James Snodgrass looks at advances in sorting technology for plastics recycling, many of which involve artificial intelligence

You can't write an article about sorting in 2025 without mentioning artificial intelligence (AI). You probably couldn't write an article about any activity without mentioning AI, for that matter, such is its staggering growth since the generative AI large language model (LLM) ChatGPT was unleashed on an unsuspecting public in 2022.

AI is not a new concept in sorting technology, whether using machine learning to eliminate scraps of black plastic, or picking the juiciest, ripest strawberries with which to fill a punnet. But the public – even those who are enthusiastic about the technologies – is starting to notice two things about generative AI: it frequently makes mistakes; and, after a period of exponential progress, AI is beginning to plateau (former Microsoft CEO Bill Gates

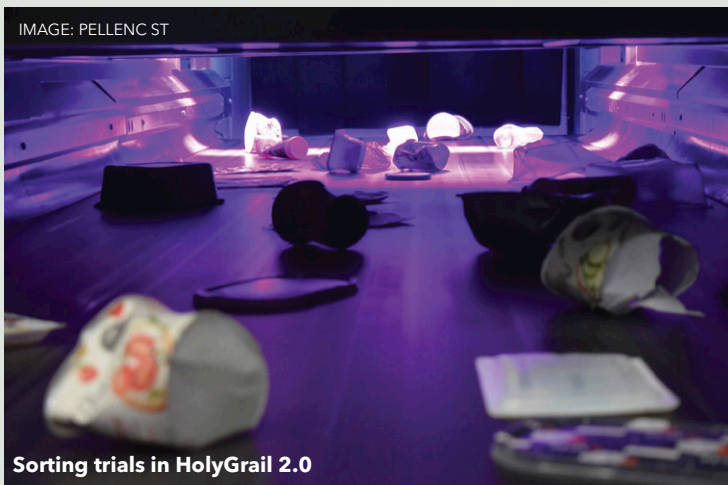
predicted two years ago that OpenAI, the makers of ChatGPT, had hit a plateau with ChatGPT 4).

In August, OpenAI released its latest LLM, ChatGPT 5, with the promise that using it would be like talking to a PhD-level expert, according to BBC News. Within a day, users expressed their dissatisfaction in a Reddit chat with OpenAI CEO, Sam Altman, and OpenAI backtracked, allowing access to the earlier ChatGPT 4 model to paid subscribers.

When it comes to sorting technology in recycling, AI is here, and AI is extremely efficient, but even the latest technologies are said to have "near-human accuracy". When technologies approach a plateau – or what economists call "the technology S-Curve" – improvements become incremental rather than transformational. It remains

Main image:
Tomra is using artificial intelligence to accurately sort different PP packaging types

IMAGE: PELLENC ST



Sorting trials in HolyGrail 2.0

HolyGrail moves to market adoption phase

HolyGrail 2030 is the next stage in the multi-partner European project to close the loop in post-consumer rigid packaging through the use of digital watermarks to improve sorting. Following the conclusion of HolyGrail 2.0, the initiative will now focus on market adoption programmes. Early-adopter market demonstrations will be launched in Belgium (for flexible PP food packaging) and Germany (for rigid PP food packaging), with the objective of further scaling the technology and allowing participants access to dedicated recycled PP food-grade materials.

The last trials in HolyGrail 2.0 demonstrated the potential of digital watermarks for accurately sorting post-consumer rigid household packaging, achieving sorting efficiency of 90% and higher. The trials were conducted at the Hündgen Entsorgung material recovery facility in Swisttal, Germany, and used technology developed by Digimarc and Pellenc ST.

to be discovered how much it will cost to push from "near-human" to "beyond-human" accuracy.

In July, **Tetra Pak** said it is making further investment into the UK's carton recycling capacity with the country's first AI-powered optical sorting system. Although 75% paper, Tetra Pak's cartons have a PE content of 20% (with aluminium making up the final 5%).

Developed by British startup **Recycleye**, the Recycleye QuantiSort system has been installed at Cumbria Waste Management's materials recycling facility (MRF) in Carlisle. Using AI and high-definition cameras, it identifies beverage cartons in mixed waste and ejects them with pneumatic valves. Tetra Pak says the system delivers over 98% purity and can be trained more efficiently than older methods, enabling a significant boost in processing capacity.

The Carlisle facility serves a wide area of northwest England, including Cumberland,

Westmorland and Furness, and parts of Scotland. Two more UK recycling facilities will be upgraded with Tetra Pak's support, bringing its 2025 UK sorting infrastructure investment to \$1.9m. In May, J&B Recycling in Hartlepool became the first site to receive new robotic sorting arms from Recycleye. A third site will be named later this year.

The push comes ahead of the UK government's Simpler Recycling policy, due in March 2026, which will require all households in England to have kerbside carton recycling and businesses to separate specified recyclable materials.

Awantika Chadha, sustainability manager at Tetra Pak UK, said: "This announcement of another upgrade to a UK MRF demonstrates our commitment to improving the UK's recycling infrastructure and transforming the UK's circular economy. We are particularly pleased to be helping to implement AI-powered optical sorter technology in the UK for the first time. We hope this collaboration with Cumbria Waste Management and Recycleye will act as a blueprint for the upgrade of food and beverage carton sorting capabilities across the UK."

Victor Dewulf, co-founder and CEO of Recycleye, said: "We are proud to collaborate with Tetra Pak and Cumbria Waste to deliver Recycleye QuantiSort for bulk recovery of food and beverage cartons, using a cutting-edge AI optical sorter innovation. This project demonstrates the capability of AI to detect and recover items such as food and beverage cartons, offering MRFs a flexible technology to adapt to changing material streams."

Computer vision

Recycleye says QuantiSort is an AI-powered optical sorting system engineered to achieve "near-human" accuracy at high speeds, processing up to 1,000 ejections per minute depending on the width of the conveyor belt. It uses advanced computer vision, powered by the CogniScan AI system trained on over a billion waste images, to distinguish objects based on colour, texture, shape and contextual cues. This enables it to identify items made of similar materials, or even multi-material objects such as batteries and PCBs. Once detected, items are swiftly and accurately removed from the waste stream using a pneumatic ejection system, developed in collaboration with **MSS**. Recycleye says the combination of sophisticated AI vision and precision ejection delivers unprecedented purity and granularity in sorting, maximising material value.

Launched in April 2024, **Tomra's** Gain Next (styled "GAINnext") cracked one of the industry's toughest challenges – distinguishing food-grade from non-food-grade packaging made from the

same polymers – by applying deep learning. Traditional near-infrared (NIR) sorting technology was unable to distinguish between food and non-food packaging, because of visual similarity and the use of the same polymers.

Gain Next integrates with Tomra's Autosort platform, using AI trained on thousands of images to recognise subtle visual cues and, the company claims, achieve over 95% purity when separating PET, PP and HDPE food packaging from non-food items. Later in 2024, Tomra expanded the system with the Gain Next PET Cleaner application, designed to tackle opaque PET bottles alongside foils and textiles, removing over 92% of these contaminants. This not only increases rPET yield but also boosts market value.

At PRSE 2025, Gain Next was named Recycling Machinery Innovation of the Year, praised as "an innovative recycling technology capable of solving complex sorting tasks ... increasing sorting granularity". The technology has since been demonstrated at WasteExpo, where it was showcased alongside Tomra's PolyPerception waste analyser, highlighting how AI sorting and real-time monitoring can work in tandem to raise both the

quantity and quality of recovered plastics.

Tracking for brands

In June this year, **Greyparrot** unveiled Deepnest, which it calls "the world's first waste intelligence platform for brands", promising to link packaging producers with recyclers through real-world performance data. The launch, held during London Climate Week, drew representatives from FMCG brands and recyclers, including Mars, Costa, PepsiCo, Amcor, Dow, Biffa, Suez, Veolia, WRAP and Innovate UK.

"Deepnest is a combination of everything we've learned from stakeholders across the recycling and packaging value chains," said Greyparrot CEO Mikela Druckman. "It's not just a product launch – it's about collaboration."

Using AI-powered computer vision, Deepnest analyses millions of packaging items moving through waste facilities. It identifies materials, formats and brands, then aggregates the results into dashboards that track recyclability, contamination rates and recovery outcomes. This data allows brands to benchmark packaging performance and redesign with circularity in mind.

AMI | Events

Polyethylene Films

February 2-4, 2026 | Tampa, FL, USA

“

PE Films is one of the best conferences you can attend, whether you are a converter, producer, or service provider. The presentations provide insightful information about the trends affecting our industry, as well as up to date information about the many initiatives that the whole value chain is taking in order to achieve circularity. Can't recommend it enough!

”

Chemical Polymer Market Consultants

JOIN US IN TAMPA

Plastretur collects used plastic packaging from all over Norway and transports it to the Områ sorting facility in Indre Østfold



A panel discussion moderated by Charlie Mercer of the Startup Coalition explored the importance of clarity in a complex system. Biffa's head of innovation, Amy Hooper, said: "Platforms like Deepnest make conversations with brands so much easier – you can show that if you make this change, we can see the concrete impact."

Amcor's circular economy director Mark Roberts warned that well-intentioned formats such as compostables and composite cartons often fail in UK recycling systems: "The challenge is making sure we're using the right materials for the right products."

Greyparrot co-founder Ambarish Mitra called the launch a "turning point" for the sector: "We chose waste because we care about it... This data, if used well, will enable collaboration that makes real change."

New facilities

Germany-based multinational recycler **PreZero** has opened a new lightweight packaging sorting plant in Sollenau, Austria, which it describes as one of the most modern in Europe. The 44,000 m² facility has a maximum annual capacity of 100,000 tonnes. It uses 35 NIR separators and AI-based object recognition to sort pot-consumer packaging waste with "minimal" manual intervention.

A key feature is the integration of the BatterySort system from **WeSort.AI**, designed to reduce fire risk from lithium batteries mistakenly discarded with household packaging waste. The system combines X-ray transmission and machine learning to identify batteries and battery-powered devices at the intake stage. Detected items are removed from the waste stream using air jets and deposited in fireproof containers.

Incorrectly disposed batteries have become a significant hazard for recycling facilities, with the German Federal Waste Management Assn estimating quarterly fire-related losses at around €250m in late 2024.

PreZero said the plant is part of its strategy to increase the proportion of waste processed within Europe and reduce operational downtime from fire incidents. "The prerequisite for this is optimal waste separation and effective recycling. This is the only way to reuse high-quality recyclable materials and return them to the raw materials cycle," said Dietmar Böhm, CEO of PreZero International. "With the pioneering sorting plant in Sollenau, we are making a significant contribution to European resource sovereignty." The site is expected to serve as a model for future upgrades across its network.

After two years of construction, Norway's new 13,000 m² **Områ** plastic sorting facility is in the "warm" commissioning phase. Jointly owned by Tomra Feedstock – a business unit focused on creating high-quality plastic feedstock from waste streams that would otherwise not be recycled – and Plastretur, the non-profit responsible for collecting and recycling plastic packaging in Norway, the plant began commissioning on 28 April, with the first bale of plastic waste placed on the conveyor.

Områ is a Norwegian word meaning to rethink or reconsider, and also a blend of "om" (about/around) and "rå" (raw). Joachim Amland, Senior Vice President and head of Tomra Feedstock, said: "We are pleased with the name we have chosen – Områ evokes some important associations that we think make it an excellent choice for Norway's first national facility designed to capture all types of plastic from the waste stream and give it a new life as a raw material for new plastic products."

He continued: "Sorting is essential to increase the degree to which plastic can be recycled. By sorting plastic into the purest monofractions, it can then be recycled and used again. In this new national facility we are using Tomra's most advanced sensor technology and machine learning capabilities to be able to deliver the quality of raw material that recyclers need."

Following warm commissioning, the plant will ramp up operations over the autumn ahead of its official opening on 5 November 2025. At capacity it will be able to process 90,000 tonnes of plastic packaging per year, with the capability to sort plastic packaging into ten different polymer categories.

Also in Norway, recycling company **Infinitum** has started a new sorting plant for packaging at Skurve, on the southwest coast of the country. The plant was opened in November 2024 in collaboration with **Nordic Recycling Systems (NRS)**, a full-service supplier of technical solutions for handling and recycling of used beverage containers. **Pellenc ST** technology installed at the plant comprises a Compact+ NIR sorter used to recover all PET bottles

and Vision spectroscopy to separate them by colour, with above 99% purity for the clear PET fraction. Once sorted, PET bottles (around 70%) and aluminium cans (around 20%) are sent to their own recycling channels for a second life. The plant has capacity to process more than 14,000 tonnes of PET bottles and beverage cans every year.

Like other optical sorting technology companies, Pellenc ST has been developing AI. Last year, it launched its first solutions equipped with AI for the cleaning of PE streams and the complex separation of paper/cardboard. By relying on its CNS Brain technology, Pellenc ST is now taking up a new challenge in the field of PET sorting.

"We have developed a new artificial intelligence model capable of recognising transparent PET bottles covered with a sleeve or a large label, which are difficult to recognise using NIR/VIS alone. Our model already detects more than 85% of sleeved bottles and we expect to exceed the 90% mark in the near future," said Kevin Alazet, AI manager for Pellenc ST.

This solution also helps to reduce losses, which have fallen from 7% to less than 2%. CNS Brain is one of the AI options offered by Pellenc ST that does not require additional equipment and does not generate additional energy consumption or maintenance needs, the company says.

For more difficult applications, Pellenc ST equips its machines with an additional camera and offers the AISort option to address new use cases. The best example, according to the company, is the separation of food packaging and non-food packaging made from the same or similar material. Thanks to the AI module and multi-sensor fusion, the optical sorters supplied by Pellenc ST can now address this issue and obtain high-quality recycled products through extremely accurate sorting, it says.

Future directions

What if sorting of multi-layer materials is too hard a nut to crack? This is an oversimplification of a review from a team of researchers at the **University of Buffalo** in the US in *Industrial & Engineering Chemistry Research*, which examines how emerging technologies can make plastic recycling more efficient.

Using a process-systems-engineering framework, the research considers a range of techniques, from chemical solvents that selectively dissolve particular polymers to AI-enhanced automated sorting systems capable of improving separation of complex waste streams. The authors conclude that solvent-based recycling represents a promising, economically viable path (particularly for plastics



IMAGE: PELLENC ST

traditionally hard to sort) though replacing fossil-derived plastics with bio-based alternatives remains uncertain for now.

In May this year, a research team led by Vaishali Maheshkar (also from University of Buffalo) and colleagues released a detailed evaluation of machine-learning methods for optical plastic sorting in MRFs. The study compiled a novel dataset exceeding 20,000 images – drawn from real-world MRF feeds, public collections, and online sources – to thoroughly test computer-vision models including two-stage detectors like Mask R-CNN and single-stage models like YOLO.

The researchers' goal was to assess both the strengths and practical limitations of these visual systems under realistic operating conditions. The research found that although optical systems can identify plastics under controlled conditions, they struggle in real world environments because they overly depend on visual cues like colour, shape, labels, or even the conveyor belt itself, rather than intrinsic material properties. The study therefore recommends the integration of complementary sensing methods – such as spectroscopy – with computer vision to achieve accurate and reliable sorting of plastics in complex real-world waste streams.

Above: Pellenc ST Compact+ optical sorting unit

CLICK ON THE LINKS FOR MORE INFORMATION:

- > www.tetrapak.com
- > <https://recycleye.com>
- > www.mssoptical.com
- > www.tomra.com
- > www.greyparrot.ai
- > <https://prezero-international.com>
- > www.wesort.ai
- > <https://omraa.no/en>
- > <https://infinitum.no>
- > www.nordic-recycling.com
- > www.pellencst.com
- > www.buffalo.edu
- > www.digitalwatermarks.eu

AMI | Events Innovation Series

November 11, 2025 | Cleveland, OH, USA

One date, one location, four events - discover agenda updates

**Performance
Polyamides**

**PFAS
Workshop**

**Polymers in
Flooring**

**Sustainability
in Design**

FIND OUT MORE

Performance Polyamides sponsored by:



Polymers in Flooring sponsored by:



Second pass: innovations in recycling and granulators

Advances in granulators and recycling include new models for medical applications, a grinder for large injection moulded parts and a way of adding predictive maintenance

With companies all along the supply chain under pressure to cut their carbon footprint, it makes sense that injection moulders are incorporating more recycling and regranulation into their operations.

The latest Smart Granulator control from **Conair**, called SG2, adds predictive maintenance to larger Viper granulators used in central size-reduction systems or in-line applications that process continuous, high volumes of scrap.

The SG2 control made its US debut on a Conair Viper 1736 granulator at last year's NPE exhibition. Like its predecessor, the SG1 - offered on Viper 12, 17 and 23 Series granulators - the optional SG2 control shares Conair's common control interface, housed in a 7in colour touchscreen HMI. It also shares a new PLC platform with power cabinet wiring that simplifies connection and sequential control of shredders, conveyors, evacuation systems and other equipment commonly used in central and in-line size-reduction systems.

"The new capabilities of the SG2 control open the door to exacting measurement of the factors that drive granulator maintenance, whether it's knife changes, bearing lubrication, or screen replacement," said Dave Miller, general manager of size reduction at Conair.

In operation, the SG2 control gathers performance data from sensors within the granulator - rotor RPM, motor load/ampage, cutting chamber and screen temperatures, and vibration levels. Then, it compares the data to established 'good' data reflecting desired equipment performance. If the live data is outside the desirable range, the SG2 alerts operators.

It uses alarms for situations that require immediate attention (such as a Low RPM or High Amp alarm indicating a possible material jam), or a combination of maintenance trackers, (such as

knife status display) trend-line displays, or on-screen reminders to indicate upcoming maintenance needs.

When linked to SmartServices - Conair's cloud-based Industry 4.0 platform - Miller says the SG2 control in the Viper granulator can provide trending data about equipment health to the SmartServices dashboard, and send maintenance reminders to the proper personnel.

"It means you're never running with dull knives, worn bearings, or overloaded motors - all problems that can cause future unplanned downtime if not addressed," he said.

Digital control

Hellweg Maschinenbau has developed a number of digitally controlled grinders that claim to offer efficient, energy-saving plastics recycling.

These include: the MDSi 340/150 Smart Control machine-side grinder with fill level monitoring; MDSi 600/300 Smart Control Plus central grinder; and MDSGi 1500/600 - one of a new series of wet



Main image:
Various sizes
of rotor from
Herbold
Meckesheim
granulators
were seen at
Fakuma

Right: Conair's SG2 Smart Granulator control adds predictive maintenance to larger Viper models

grinders with forced feed that have low power consumption.

Hellweg's 300 series central grinders combine a compact design with high performance. Thanks to the sturdy machine housing and the high moment of inertia of the massive, solid rotor they enable powerful grinding of a variety of parts, including pipes and profiles, thick-walled mouldings and - when using the special BR rotor - single-stage shredding of solid lumps from production start-ups.

The MDSi 600/300 Smart Control Plus version includes power consumption analysis to optimise economy and automated lubrication with Bluetooth monitoring to minimise maintenance effort.

Each system features Hellweg's own digital Smart Control System which captures parameters such as power consumption, motor speed and bearing temperatures, as well as blade, screen and V-belt status. Because the control system can continuously optimise the relationship between motor load and throughput, it ensures economical operation while requiring little input from operators.

Smart Control is generally available for all models and sizes of Hellweg system, starting from the 150 series machine-side grinders for granulating small parts and sprues up to the 600 series heavy duty grinders designed for the toughest applications.

Redesigned pulveriser

Neue Herbold has renewed its ZM 800 Pulverizer with a number of new features.

One is the stream technique optimisation of the machinery housing. In the past, machines of this type were made with a round housing on a platform - but the new housing passage is supplied in a curved design. The background for the modification is that the material's angular momen-

tum is used for the discharge, since the material is pre-accelerated for the later air conveyance. The modification helps to raise throughput rates, while energy consumption is unchanged.

Design and ergonomics were also important factors in the redesign. The standard machine extensions - such as vibro-feeder or mounting bracket for the vacuum feeder - blend into one compact machine concept with clear lines. Meanwhile, all parts are easily accessible.

Even the door lock has been optimised, and now operates more efficiently and with less space requirements. Cables, connections and sensors are gathered in a central processing unit. Control unit of water injection - through valves and sensors - is now placed in an accessible housing that is dust- and splash-proof.

Size reduction

Weima presented a number of systems - including granulators and shredders - at last year's NPE show in the US.

Its size reduction machinery included its WLK 10, WLK 800 F+, and WKS 2200 single-shaft shredders. These were seen on two booths - in the main hall, and in the show's Recycling Zone.

The WLK 800 F+ shredder is aimed at film, fibre and filaments. It is built to handle a wide range of materials and is focused on materials that are prone to wrapping. The shredder's hopper is designed so it can handle large volumes of material with ease. The WLK 800 offers easy access for maintenance and cleaning, ensuring uninterrupted operation and minimal downtime.

Its variable-speed drive system allows for precise control over the shredding process, while its F+ rotor ensures consistent performance and reliability. ➤

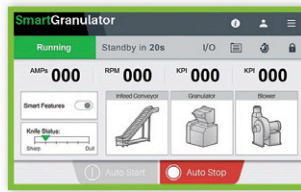


IMAGE: CONAIR

Below: Hellweg has developed a number of digitally controlled grinders



IMAGE: HELLWEG

TEXTILES RECYCLING EXPO

24-25 June 2026 • Brussels, Belgium

The leading destination
for the textiles recycling
community



WATCH A VIDEO OF THE DEBUT HERE



2025 IN NUMBERS:

3,336 attendees

126 exhibitors

53 speakers

www.textilesrecyclingexpo.com



STAND BOOKINGS ARE NOW OPEN!

Contact us today >

Right: CMG's G17-Med series can be used in medical applications



Entire expertise

At Fakuma last year, **Coperion** and **Herbold Meckesheim** showed their expertise in entire systems through virtual animation – including systems for recycling plastic. The processes involved can be experienced digitally with the aid of simulation.

Rotors from Herbold Meckesheim granulators will be seen in various sizes and for many applications. The cutting geometry is the main reason for the high efficiency the rotors, says the company.

Along with individual components, Coperion and Herbold Meckesheim deliver entire systems for plastics recycling. From mechanical processing – shredding, washing, separating, drying and agglomerating of plastics – to bulk material handling as well as feeding and extrusion all the way to compounding and pelletising, such plants cover the entire plastics reclamation process chain.

Customers can test a wide variety of plastic

recycling processes and technologies under actual production conditions – in Coperion and Herbold Meckesheim's fully equipped test centres – before they invest. Herbold's 800m² facility in Meckesheim, Germany, includes a complete washing line for cold and hot washing as well as many size reduction solutions including shredders, granulators, pulverisers and plastic compactors for densification. In 2023, Coperion opened a recycling innovation centre in Weingarten, Germany with individually configurable recycling plants – allowing recyclate to be conveyed, fed, extruded, compounded, pelletised and deodorised.

Medical granulation

CMG has launched a new series of small granulators that can be used in the medical industry.

The new G17-MED series are several and all contribute to obtaining the highest degree of precision and cleanliness, regrind quality (homogeneous particle dimensions and absence of dust), efficiency of operation.

The new granulators are applicable to injection moulding and blow moulding – but in the ET1 or ET2 configuration are suitable for extrusion.

The new series is designed to obtain homogeneous regrind shape and dimensions, along with little to no presence of dust. One benefit of the new line is the ability to produce regrind with very small dimensions – which has no adverse impact on the quality of the finished medical product. Small capacity systems, including injection moulding machines and extruders, are equipped with small diameter plastification screws that cannot process granules with dimensions exceeding those of virgin

AMI

Expert consultancy tailored to your company's needs

Whatever your challenges, our experts bring an unrivaled knowledge of the plastics industry, value chain, and key markets.

Contact us today to discover how we can drive your business forward.

www.amiplastics.com/consulting

AMI | Events

Stretch and Shrink Film

December 9-10, 2025 | Tampa, FL, USA

Unwrapping sustainable
innovations in the stretch and
shrink film industry

Listen to industry leaders including:



Dan Felton

President & CEO
Flexible Packaging
Association (FPA)



Esteban Sagel

Principal and CEO
Chemical and
Polymer Market
Consultants



Shawn Cook

Sales Manager -
Plastics Additives
Dover Chemical



Josephine Hsu

Associate
Keller and Heckman

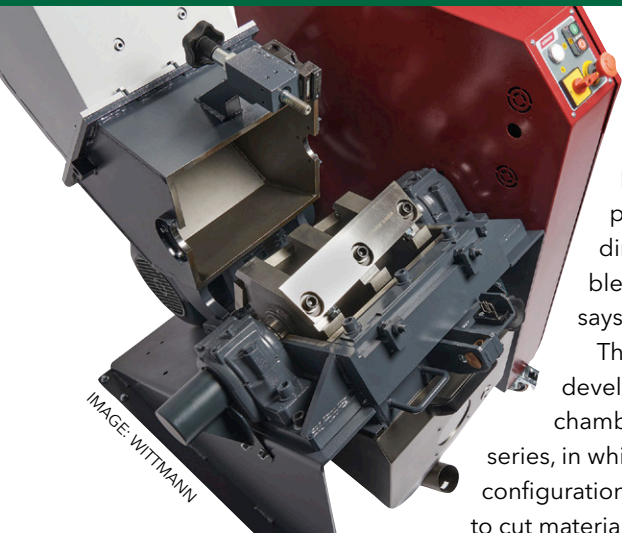
Book your place today

Sponsored by:



Supported by:





Above:
The cutting chamber of Wittmann's G-Max XL is easily accessible

granules. The G17-MED granulators produce regrind that is dimensionally comparable to the virgin pellet, says CMG.

The company has also developed a new cutting chamber for its Evoluzione series, in which a new rotor configuration allows rotating blades to cut material perpendicularly against fixed blades.

The blades are mounted directly on the end of the support bracket, which facilitates high inclination of the blades and allows for easy and quick maintenance and replacement as the cutting chamber is accessible from the front of the machine. The material does not rotate with the rotor, avoiding the dust and small particles that become waste material in the washing phase. The production of micro particles is reduced to a few percentage points, compared to 15% or more with a conventional granulator, says CMG.

The open rotor design occupies 30% of the space inside the cutting chamber and the ratio between the volume of the rotor and the cutting chamber is 30/70, while that of conventional granulators is 70/30. The cutting chamber also benefits from tangential development, guaranteeing smooth material ingestion without resorting to forced feeding systems.

Sprue recycling

Wittmann says its G-Max XL large-sized grinder is aimed at larger injection moulded parts up to 500 x 200mm.

The beside-the-press blade granulator has a compact footprint and a maximum material throughput of 100 kg/hour. Ideal for inline recycling of sprues and reject parts during the start-up phase, it can also be used as a central granulator.

The open design of the three-blade rotor makes it suitable for grinding heat-sensitive materials that still contain heat from processing. Open spaces between the blades and rotor shaft ensure efficient ventilation and good cooling. Knives can be changed easily. Using a pre-adjustment fixture for the cutting gap, the knives are preset outside the cutting chamber to the correct distance from the two fixed counter blades. The rotating and fixed blades, which are angled in opposite directions, ensure a clean scissor cut.

The model is driven by three V-belts, which ensure optimal torque and a low speed of 340 rpm

at 50Hz. At this speed, hardly any particles are carried around the rotor – allowing them to pass through the screen in an optimal manner. The result is a cleaner, more uniform regrind and optimised throughput – with low noise development and energy consumption.

The sound-insulated material hopper further reduces noise. The feeding hopper can be aligned horizontally or vertically, so there is the option to feed parts by robot, conveyor belt or manually.

Options include: placing a magnet on one side of the hopper, to prevent feeding of metal parts; and, a water-cooled cutting chamber makes grinding warm or hot material easier.

No tools are required to access the cutting chamber or screen fixture, making cleaning and maintenance very easy. This means that even material and colour changes can be carried out quickly – further increasing productivity.

Continuous throughput

Getecha has developed several central granulators for the continuous throughput of medium to large volumes of plastic waste.

Designed for comminution capacities of up to 1,000 kg/h, the RS 45090 hopper granulator can grind both missing parts and plates and pipes. For this purpose, it has several bypass hoppers as well as a 45kW motor that drives five rows of mounted rotor blades (rotor diameter 450mm) against two stationary blades. The screen hole diameter is 8mm as standard but can be adapted to different material properties.

The front feed hopper of the RS 45090 can be fed manually or is equipped by Getecha with a belt conveyor as part of the process automation. For ergonomic reasons, the hopper and granulator body are double-walled with integrated sound insulation. Thanks to the drive being moved upwards and into the housing, the mill is compact despite its size and takes up relatively little space. The opening mechanism for the hopper and the screen carriage can be operated hydraulically, which simplifies cleaning and maintenance.

It also offers smaller central granulators. The RS 30040 is designed for a throughput of up to 360 kg/h with a 22kW drive. It operates with a closed three-blade variation rotor with a diameter of 300mm, in which all components in contact with the product are made of stainless steel. The cutting length here is 410mm.

At the same time, **Moretto** presented a range of innovations from across its ancillary product range at last year's Fakuma – including its GR 6050 Hyper Cut – a low-speed grinder that is new to the market.

The starve feeding granulator is suitable for grinding waste pieces, sprues and blown parts with 15 movable blades. The engine power is transferred on a single mobile blade and three standard fixed blades. The 160-degree grid increases productivity while reducing consumptions.

Granulator integration

Rapid Granulator has integrated a granulator into its Raptor Shredder base.

At NPE last year, it showed the Raptor Duo – which is available for the Raptor 1350 model. The system offers an open-hearted design, low energy consumption and pre-adjustable knives for optimal sharpness and reduced down time, says Rapid.

The Raptor Duo includes a reinforced pusher system. Upgraded pneumatic cylinders help the operator to increase output, making the machine more versatile for different applications. The pusher body system now has increased depth and reinforced side guides to support the pusher – helping it withstand irregular load without losing production. A new corrugated floor allows it to be used in demanding applications such as thin wall materials. This floor design prevents jamming, reducing the

need to use scrapers and improves the flexibility in range of products it can efficiently shred.

In addition – to help meet growing demand and handle larger projects – the company is expanding its factory in Bredaryd, Sweden with a 1,600 sq m assembly hall.

This will help Rapid to deliver complete systems and larger solutions, it says. The new hall is designed to optimise production flows and create better conditions for managing large projects. It features high ceilings and equipment such as lift tables – that can handle very heavy components.

CLICK ON THE LINKS FOR MORE INFORMATION:

- > www.conaingroup.com
- > www.hellweg-granulators.com
- > <https://neue-herbold.com>
- > <https://weima.com>
- > www.cmg-granulators.com
- > www.coperion.com
- > www.herbold.com
- > www.wittmann-group.com
- > www.getecha.de
- > www.moretto.com
- > www.rapidgranulator.com

SPREAD THE WORD

AMI | Magazines

2025 Media information

Committed to the plastics processing industry since 2008

Exceeding 70,000 subscriptions worldwide

Compounding WORLD | Film and Sheet EXTRUSION | Pipe and Profile EXTRUSION | Plastics Recycling WORLD | Injection WORLD

www.amiplastics.com/magazines

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

Meet the AMI Magazine Team

Editorial

Chief Editor
David Crompton
david.crompton@amiplastics.com

Chief Executive
Chris Sweeney
chris.sweeney@amiplastics.com

Sales

Head of Sales
Paul Belling
paul.belling@amiplastics.com

Sales agents

Asia and Hong Kong
Magazine Life
magazine.life@amiplastics.com

Europe
Spartan Ltd
spartan@amiplastics.com

North America
Spartan Ltd
spartan@amiplastics.com

Our portfolio of digital magazines play a significant role in providing access to technical developments, product innovations, business transformation and global market trends to each market sector.

Through our digital magazines we provide a wealth of information to our readers, including:

- Research and development
- New product launches
- Industry news and analysis
- Expert advice and guidance

Editorial formats

Our digital magazines are available in a variety of formats, including:

- PDF format
- HTML format
- Interactive format

Advertising Solutions

Advertising formats

The digital advertising solutions we offer are designed to help you reach your target audience in the most effective way possible. Our formats include:

- Banner ads
- Native ads
- Sponsored content
- Video ads
- Email newsletters
- Social media posts
- Industry surveys

Email newsletters

Our email newsletters are a great way to keep your audience up to date with the latest news and developments in the plastics industry. They include:

- Industry news
- Product launches
- Expert advice
- Company news

Download these new product brochures

COPERION: RECYCLING SYSTEMS



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

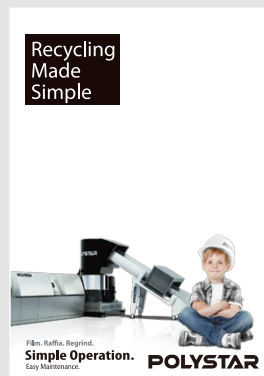
coperion
ICETRON

coperion
SOLUTIONS DESIGN PARTNER

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



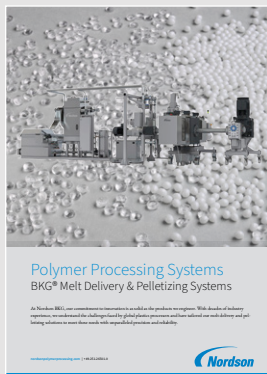
Recycling
technologies

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

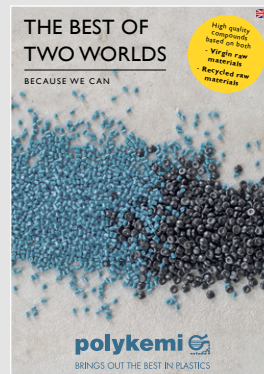
As Nordson BKG, our commitment to innovation is visible in the products we engineer. With decades of industry experience, we understand the challenges faced by global plastic processors and have tailored our melt delivery and pelletizing solutions to meet their needs with superior precision and reliability.

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. Or download the issue in the relevant Apple or Android app



Plastics Recycling World July/August 2025

The cover feature of Plastics Recycling World's July-August edition looks at EU regulation driving the use of recycled plastics in cars, while other features provide updates on chemical recycling and washing technologies.

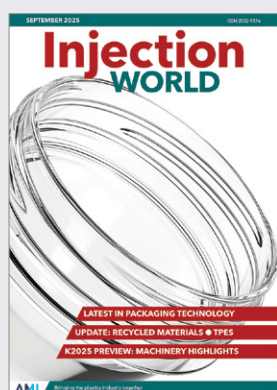
[▶ CLICK HERE TO VIEW](#)



Plastics Recycling World May-June 2025

Plastics Recycling World's May-June edition looks at how post-industrial recycled content is growing in new applications, success stories at shredder companies, and new compatibilisers.

[▶ CLICK HERE TO VIEW](#)



Injection World September 2025

This year's K Show figures largely in the September issue of Injection World, with a feature on packaging developments with all-electric machines and a preview of major machinery exhibitors. Plus thermoplastic elastomers and materials containing recyclates are also covered.

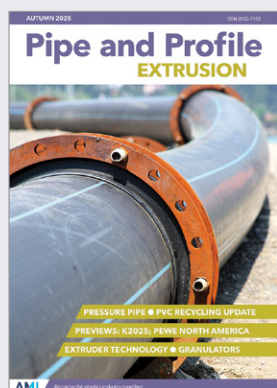
[CLICK HERE TO VIEW](#)



Compounding World September 2025

In addition to the cover story on advances in pigments, the September issue of Compounding World provides a K2025 guide for compounders about machinery and equipment exhibitors. Other features cover stabilisers and thermal compounds.

[▶ CLICK HERE TO VIEW](#)



Pipe and Profile Autumn 2025

Pipe and Profile Extrusion's Autumn edition has a cover feature that looks at what's new in high pressure pipe, and features on PVC recycling, new granulators and extruder technologies, plus previews of K2025 and the US Plastics Extrusion World Expo.

[▶ CLICK HERE TO VIEW](#)



Film and Sheet September 2025

Thermoforming is the focus for the cover story of Film & Sheet Extrusion's September edition, which also contains articles on K2025 materials exhibitors, PVC plasticisers, multilayer packaging and lab extruders.

[▶ 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

2025	8-15 October	K2025, Dusseldorf, Germany	www.k-online.com
	12-13 November	Plastics Recycling World Expo N America, Cleveland, US	https://na.plasticsrecyclingworldexpo.com
	4-7 November	Ecomondo, Rimini, Italy	www.ecomondo.com
	4-7 December	PlastEurasia, Istanbul, Turkey	https://plasteurasia.com
2026	9-12 January	Plastex, Cairo, Egypt	www.plastexegypt.com
	20-22 January	Swiss Plastics Expo, Lucerne, Switzerland	https://swissplastics-expo.ch
	5-10 February	PlastIndia, New Delhi, India	www.plastindia.org
	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.plasttechniknordic.com
	29-30 April	Textiles Recycling Expo, Charlotte, NC, USA	www.textilesrecyclingexpo.com/usa
	7-13 May	Interpack, Dusseldorf, Germany	www.interpack.com

AMI CONFERENCES

16-18 September 2025	Single-Serve Capsules, Malaga, Spain
11 November 2025	Sustainability in Design, Cleveland, OH, US
3-4 December 2025	Refillable and Reusable Packaging, Berlin, Germany
9-10 December 2025	Flexible Packaging Innovation and Recycling, Vienna, Austria
9-10 December 2025	Stretch and Shrink Film, Tampa, FL, US
9-11 December 2025	Wind Turbine Blades, Düsseldorf, Germany

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.

