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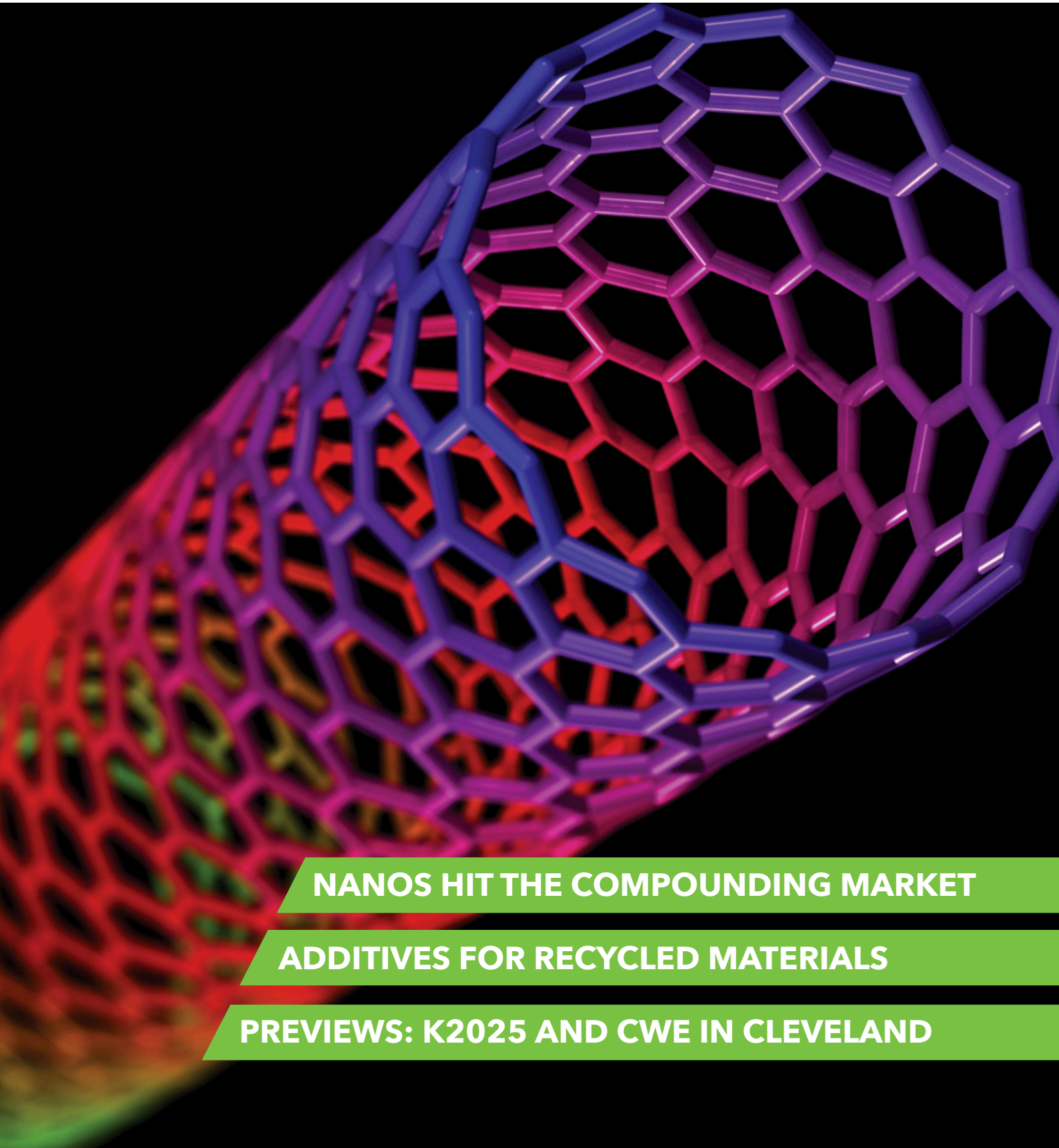
Compounding WORLD



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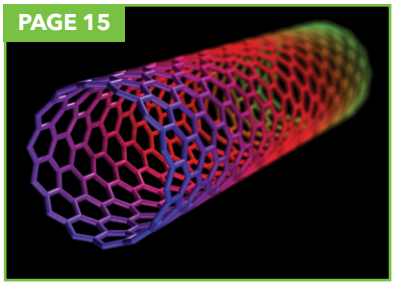

COMING NEXT ISSUE

› Black and white pigments › Bio-based materials › Mixers › PVC recycling

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Xaloy buys screw maker

Polymer processing component manufacturer Xaloy has acquired Ultimate Twin Screws (UTS), based in Ontario, Canada, and will combine its strengths with UTS's specialised knowledge in twin screw design and production to form Xaloy Canada Corp.

"This acquisition reinforces our commitment to serving customers with the broadest and most innovative solutions in the industry," said Andrew Brickman, chairman of Xaloy. "By adding twin screws to our portfolio, we strengthen our ability to partner with customers in solving their toughest processing challenges."

Xaloy said that the addition of Xaloy Canada builds on its track record of innovation, including advancements in melt delivery systems, carbide coatings, trimetallic technologies, and the Fast Lane program.

› **https://xaloy.com**

Borealis to expand PP compound production

Polyolefins producer Borealis is investing €100m in expanding and upgrading facilities at its production site in Schwechat, Austria, where a new polypropylene (PP) compounding line is expected to begin operations in the second half of 2026.

Designed for applications requiring durability, heat resistance, or lightweight performance, Borealis says its advanced PP compounds are used in a wide range of industries including consumer products and appliances, infrastructure, and mobility.

"This is our third significant investment this year, following the expansion our energy business and the increase in capacity for our recyclable, lightweight polymer foam solutions," said Stefan Doboczky, Borealis CEO. "Over the past decade, Borealis has built strong expertise in circular solutions that meet our customers' expectations for quality. With more capacity, we can deliver more of the materials they need, helping them hit performance targets and move closer to their sustainability goals. This project transforms innovation into tangible solutions – bringing our We4Customers strategy to life."

IMAGE: BOREALIS

Silos at the Borealis site in Schwechat, Austria

Borealis has previously announced an expansion at its facility in Burghausen, Germany, producing its Daploy High Melt Strength PP. It said the increase in capacity addresses growing global demand for recyclable, high-performance foam solutions. The new line is scheduled to start up in the second half of 2026 and will triple Borealis' supply capability for fully recyclable HMS PP.

It said the expansion enables the transition to more circular and recyclable material solutions for customers in the consumer products, automotive, and building and construction industries.

› **www.borealisgroup.com**

Plastics sales fall in Germany in first half

IMAGE: GKV/BERLINBLICK JENS OCHMANN

Germany's plastics processing sector declined by about 1% in the first half of 2025 according to industry body GKV.

Sales of plastic packaging fell nearly 4% compared to the same period last year, while manufacturers of other plastic products – including technical parts – fell nearly 3%. Sales by manufacturers of plastic construction products were flat, while semi-finished products (such as film and sheet) rose by nearly 2% after "significant sales losses last year".

"The new federal government has so far sent contradictory signals to the economy," said Oliver Möllenstädt (*pictured left*), managing director of GKV. "There is a lack of concrete reforms to relieve small and medium-sized enterprises of bureaucracy and high energy costs – and to reduce non-wage labour costs."

GKV says it wants the federal government to speed up reform to provide impetus for growth.

› **www.gkv.de**

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Exxon goes cold on European chemical recycling projects

ExxonMobil is pausing plans to build two chemical recycling projects for plastics waste in Europe, according to a report by Reuters.

The US energy and chemicals group has a €100m investment planned for two projects for chemical recycling at its petrochemical facilities in Rotterdam, Netherlands, and Antwerp, Belgium, which would process 80,000 tonnes/yr of plastic waste.

However, in an interview with Reuters, Senior Vice President Jack Williams said the two projects had now been paused because of the European Commission's proposed allocation method for the mass balance approach to be used in chemical recycling operations. The Commission has started a consultation on the Fuel-Use Excluded method it prefers for calculating output that can be claimed as "recycled" from a plant using plastics waste input (*Compounding World* July 2025). Williams said this puts integrated petrochemical facilities at a disadvantage to standalone chemical recycling facilities.

"Everything else is on track. We've had local support," he said in the Reuters report. "We want to make these investments... The only thing standing between us and doing this project is EU policy."

IMAGE: EXXONMOBIL

ExxonMobil facility in Baytown, Texas, US, where the group has two recycling units

In the same Reuters interview, Williams said that although US import tariffs were not a significant problem for the company, EU regulation was. He specifically urged the EU to repeal the Corporate Sustainability Due Diligence Directive that requires larger companies to check if their supply chains use forced labour or cause environmental damage. The application of the directive has been postponed until July 2027 to give EU member states more time to pass implementing laws.

In the US, ExxonMobil has been expanding its chemical recycling operations. In June, it said a second recycling unit at its facility in Baytown, Texas, would double the capacity there after processing more than 100m lb of plastic waste since start-up in late 2022. The group also plans a third and fourth Baytown unit and the first unit at its facility in Beaumont, Texas which would increase overall processing capacity to approximately 500m lb/yr of plastic waste.

› **https://corporate.exxonmobil.com**

EuPC calls for no change on EU's Plastics Tax

The European Commission has suggested increasing the "plastics own resource" (sometimes referred to as the "Plastics Tax") paid by EU Member States. Since 1 January 2021, the EU has received a national contribution based on the amount of non-recycled plastic packaging waste. In response, European Plastics Converters (EuPC) called on the Commission to keep the 0.80 cent/kg and earmark the proceeds into a dedicated fund to help build a more circular economy for plastics.

Contributions to the Plastics Tax depend on effective implementation and how potential impacts on competitiveness, material substitution, and enforcement, are addressed in order to avoid fraud on products, raw materials, and recyclates imported into the EU.

However, EuPC points out that the European plastics industry is facing severe issues due to high energy prices, labour, and environmental compliance costs in comparison to manufacturers operating in third countries, leading to a phase of de-industrialisation. On top of existing challenges, the current uncertain trade framework makes it imperative for the EU to safeguard the competitiveness of critical industrial sectors such as plastics and to avoid further burdens that compromise their economic viability and circular transition.

› **www.plasticsconverters.eu**

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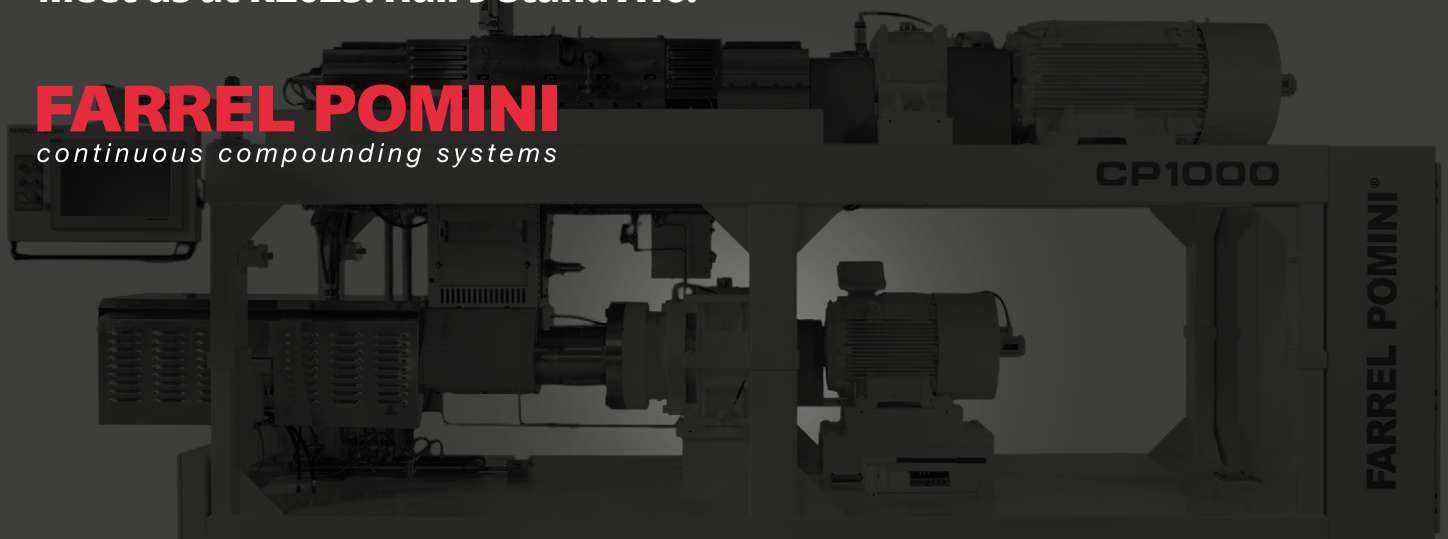
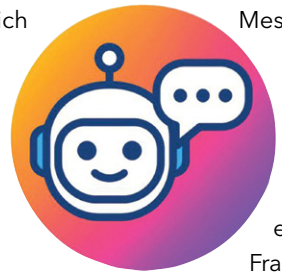


K2025 embraces digital technology

Attendees at the K2025 fair in Dusseldorf, Germany in October will be able to use a new digital service called Fair Match that connects exhibitors and visitors based on information stored in their profiles. Show organiser Messe Dusseldorf said the purpose of the tool is to enable business contacts to be made in a more targeted and efficient manner before, during, and after the trade fair with the service remaining available until the end of the year.

The integrated chat function allows direct communication and easy appointment scheduling without time-consuming coordination or lengthy email correspondence, and contacts can be saved as favourites for quick access. Communication takes place in the K app, which is available free of charge in the App Store and on Google Play.



Also offered for the first time at K2025 is K Assistant, an AI-supported virtual companion. For visitors seeking information on hall plans, exhibitors, the supporting programme or services, this chatbot is designed to ensure they are fully prepared for an optimal trade fair experience by analysing questions in context and providing structured, precise information instead of long lists of hits, said Messe Dusseldorf.

"With K Assistant, we are offering an innovative service that enables visitors and exhibitors to plan their trade fair visit even more efficiently," explains Thomas Franken, Director of K2025.

He added that digital tools such as the K Assistant chatbot are an important step towards offering customers user-friendly support.

› **www.k-online.com**

Krahn Chemie expands

Krahn Chemie is expanding its Technical Service Centre in Bottrop, Germany, to cover a total of 1,400 m² and combine laboratory services with training courses creating an environment in which theory and practice can interact even more closely.

"With the expansion of our Technical Service Centre, we are taking another step toward future viability," explains Martin John, CEO of Krahn Chemie.

In addition to expanding its range of services, the investment also drives the development and use of more sustainable products by combining technical services with a comprehensive product portfolio of bio-based and recycled products.

› **www.krahn.eu**

Avantium starts up SDH unit

Bio-based materials producer Avantium has announced the successful start-up of its sugar dehydration (SDH) unit and all auxiliary systems and utilities at its first-of-a-kind flagship furandicarboxylic acid (FDCA) plant at Chemie Park in Delfzij, Netherlands.

Since construction was completed in October 2024, Avantium has been gradually commissioning and starting up various parts of the facility which is designed to produce up to 5,000 tonnes/yr of FDCA. With the SDH unit now operational, the next steps include the finalisation of commissioning and sequential start-up of the remaining units.

"This milestone is a tremendous accomplishment for the team and a major step forward on our path to commercializing FDCA and PEF," said Bram Hoffer, Chief Operations Officer at Avantium.

FDCA is a key building block for the 100% plant-based and recyclable polymer polyethylene furanoate (PEF) branded as Releaf.

Avantium expects to begin commercial sales in the first quarter of 2026.

› **https://avantium.com**

Mitsui Chemicals restructures

Mitsui Chemicals is to implement organisational restructuring and portfolio transformation under a long-term management plan dubbed Vision 2030.

To strengthen collaboration and integration between business divisions and development organisations in the Life & Healthcare Solutions Business, Mobility Solutions Business, and ICT Solutions Business sectors, development departments will be established within each business division.

In addition the R&D Centre will be renamed the Research Centre and given a new brief to enhance core technologies and conduct research and development of solutions in new business areas, and the R&D Planning & Coordination Division will be renamed the Research Planning & Coordination Division, the company said.

To clarify and optimise roles, Synthetic Chemicals Laboratory, Polymers & Composite Materials Laboratory, Process Technology Laboratory, Mobility Development Centre, Innovative Solutions Centre for Information & Communication Technology, and the Frontier Technology Centre, will all be closed.

› **https://jp.mitsuichemicals.com**

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By Dr. Hyunseog Kim

www.ShamrockTechnologies.com

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BYK branches out in South American market

Germany-based specialty chemical and additives producer BYK has founded a new company, BYK do Brasil, and appointed Carlos Roberto C Duarte Coelho as local Managing Director, which it says sends a clear signal on the growing importance of the South American market.

"By establishing BYK do Brasil and putting Carlos Coelho in charge, we at BYK are underlining our ambitions in South America," said Dr Stefan Mößmer, Managing Director Marketing & Commercial at BYK. "There is a steady upwards trend in developments in the region, and they offer potential for further growth and an even more intensive proximity to customers."

IMAGE: BYK

Carlos Roberto C. Duarte Coelho and Dr. Stefan Mößmer

With immediate effect, the new São Paulo-headquartered company will be assuming local functions in marketing, sales, and technical service, and will effectively be the direct point of contact for customers in Brazil and the surrounding territories.

BYK said this is a strategic move, on the basis that the economic dynamics of the region – especially in the paints and coatings, plastics applications, and cosmetics segments – are recognised as a key driver of growth. The new subsidiary also lays the foundations for a more intensive development of the market, swifter response times, and even closer cooperation with customers and partners.

› **www.byk.com**

Albis acquires Brazilian distributor

Albis has acquired a majority stake in Brazilian distributor Tecnomatiz, the move into Latin America marking an important milestone in the company's global growth. Tecnomatiz, founded in 1973, will continue to operate under its established name and be headed up by Managing Director Sergio Salinas.

Albis said it will bring experience and networking from the EMEA region to Latin America in a focused and strategic way.

› **www.albis.com**

Jwell and Placo join forces

Chinese extrusion equipment specialist Jwell and Japanese processing and recycling equipment firm Placo have formed a new partnership to collaborate in areas such as high-performance environmentally friendly equipment, intelligent system development, and the joint construction of an international marketing network devoted to launching more efficient, green, and intelligent plastic processing solutions.

The collaboration is expected to drive technological breakthroughs in extrusion equipment, including precision, energy efficiency, and the use of recycled materials, providing downstream customers with more competitive products and services.

It also represents a complementary alignment of resources and technologies between the two companies, and demonstrates the collaborative nature of the Chinese and Japanese plastics machinery industries.

› **www.jwellmachine.com**
› **www.placo.co.jp**

Brenntag expands colours with China's PNM

The Brenntag Specialties Polymers & Rubber team is expanding its colour portfolio in key Europe, the Middle East and Africa (EMEA) markets through a new collaboration with PNM, based in Ningbo, China.

Luis Oliveira, Industry Market Manager Colours, CASE & Construction EMEA, said: "We offer a comprehensive product portfolio, improve formulations, and develop tailor-made solutions that meet our customers' business and performance needs."

PNM's Preperse range offers high-performance, pre-dispersed pigments with a concentration of 70–85% that are compatible with common plastics such as PE, PP, PET, and PA. Their dust-free format and dispersibility enable colouring in demanding applications like film and filament manufacturing.

› **https://brenntag.com**
› **www.precisematerial.com**

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Investment firm takes over Entek

Twin-screw extruder group Entek has a new majority owner, I Squared Capital, which is investing in the company to support its manufacturing expansion in lithium-ion battery separators critical for batteries powering electric vehicles, energy storage systems and other high-growth technologies.

Entek received a $1.3bn loan in 2024 from the US Department of Energy's Advanced Technology Vehicles Manufacturing program. I Squared said its $800m investment complements that loan to fund construction of Entek's facility in Terre Haute, Indiana, the first of its kind in the US producing wet-process lithium-ion battery separators. The facility, which will receive manufacturing and production tax credits, is expected to create approximately 763 construction jobs and 635 operations jobs in Terre Haute once operational.

The facility will produce 1.4bn m² of wet-process lithium-ion battery separators annually in its first two phases and is designed to expand to 2.1bn m². The project involves Brueckner Group as Entek's partner in biaxial stretching equipment and Clayco as the EPC contractor.

"With DOE support and rising demand in EVs, energy storage, and defence, Entek is uniquely positioned to deliver sustainable growth for our investors and the US economy," said Gautam Bhandari, Managing Partner and Chief Investment Officer, I Squared Capital.

Larry Keith, CEO of Entek, said: "With I Squared's capital, strategic expertise, and global network, we will expand the US's manufacturing footprint, create high-quality jobs, and meet surging demand for batteries across critical applications, from EVs and energy storage to military defence equipment and data centres."

Entek said that over the last four decades it has built a vertically integrated business model based on core capabilities in energy storage, advanced materials, and equipment manufacturing. Supported by Endeavour Capital and Joshua Green Corp's investment in 2019, its operations have expanded across eight countries. It says it is the only company to have expanded the application of advanced materials to include all battery separator types, including lead acid, lithium, and other emerging energy storage technologies.

› **https://entek.com**
› **www.isquaredcapital.com**

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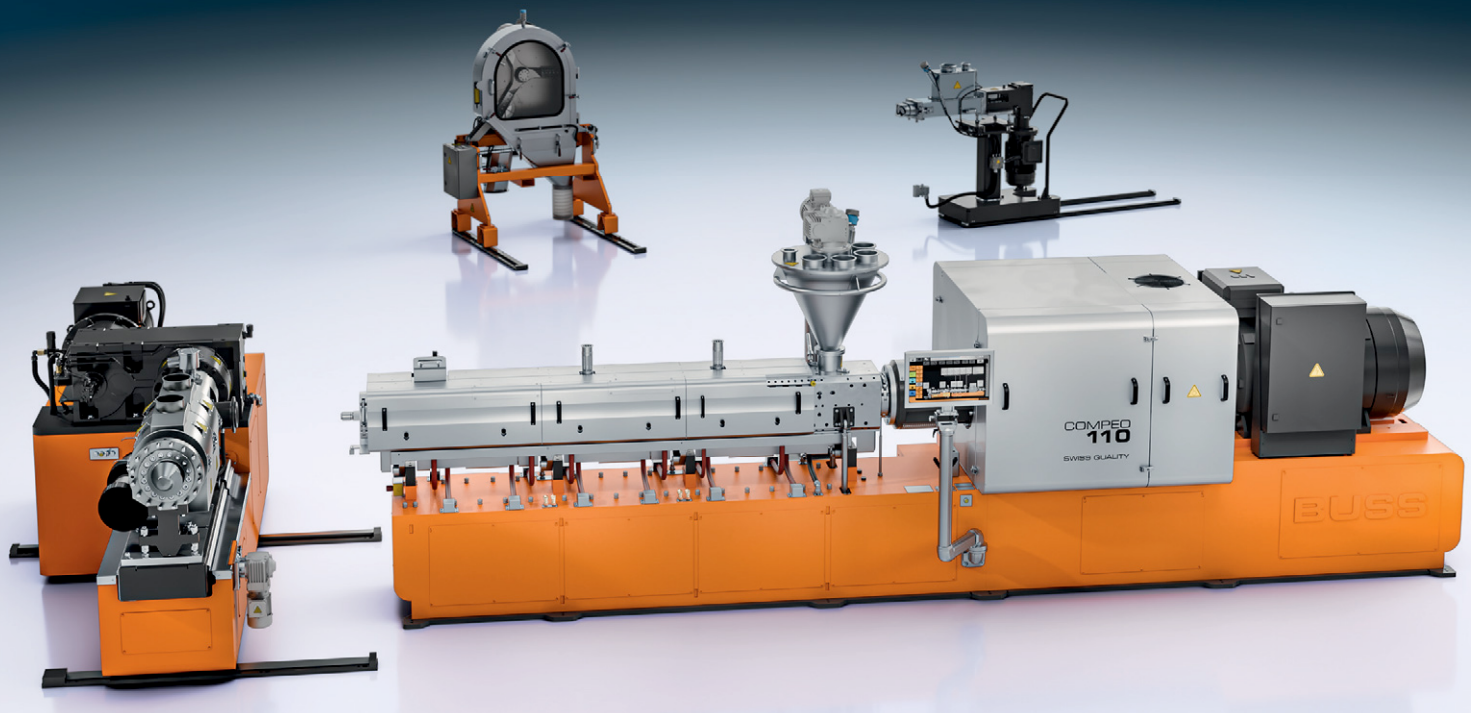

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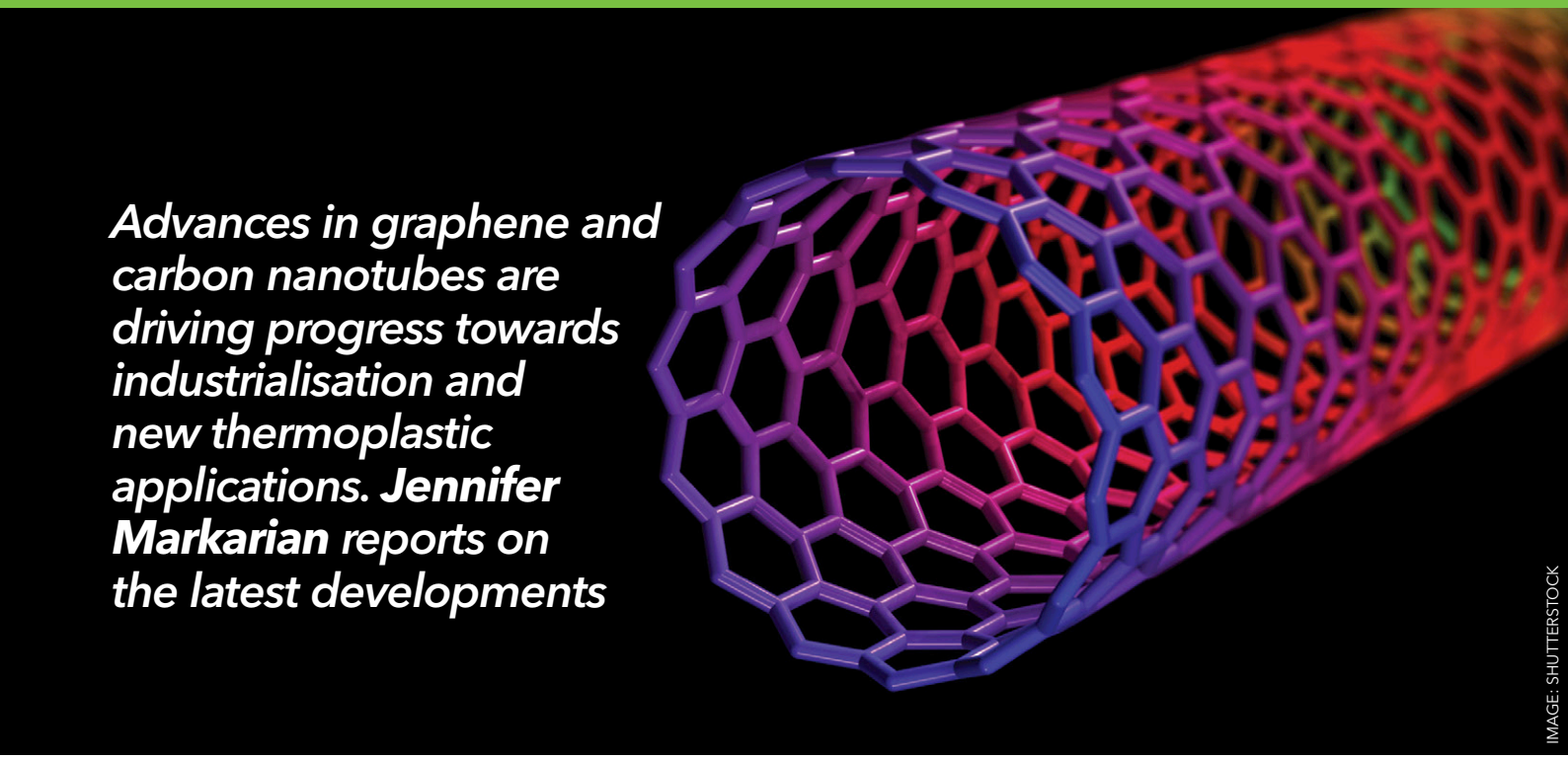


IMAGE: SHUTTERSTOCK

Advances in graphene and carbon nanotubes are driving progress towards industrialisation and new thermoplastic applications. Jennifer Markarian reports on the latest developments

Graphene and carbon nanotubes hit the market

Nano-scale additives used in plastics, as well as in other materials, include graphene (of various forms) and carbon nanotubes (CNTs). These additives promise to reduce weight and improve properties at a different level than traditional reinforcing additives.

Graphene is a form of carbon in a single layer, two-dimensional honeycomb lattice that provides exceptional mechanical strength, electrical conductivity and thermal performance, along with other benefits, explained manufacturer Black Swan Graphene. Various forms of graphene with different numbers of layers and functional groups have different advantages.

Haley Marie Keith, CEO and Co-founder of **Mito Materials**, which has a patented additive technology that functionalises substances such as graphene oxide, said that the company is working with specialty compounders who are incorporating graphene in thermoplastics. She said that graphene is continuing an upward trajectory in commercial use cases and adoption. "For the compounders, we hear value in processing and handling; from component producers, we see improvements in torsional stability, flex, and tensile, at much lower loadings than other additives. It's exciting to see graphene deliver on its promises in this market," said Keith.

While graphene had previously been targeted for high-value, niche applications, the additive is becoming competitive in general applications, added Tom Eldridge, Director of Business Development at graphene manufacturer **Hydrograph Clean Power**. "Previously, multifunctional benefits from graphene were often needed to justify its use as a premium additive. Now graphene is becoming competitive in more mainstream applications, with emphasis on fulfilling specific functional roles."

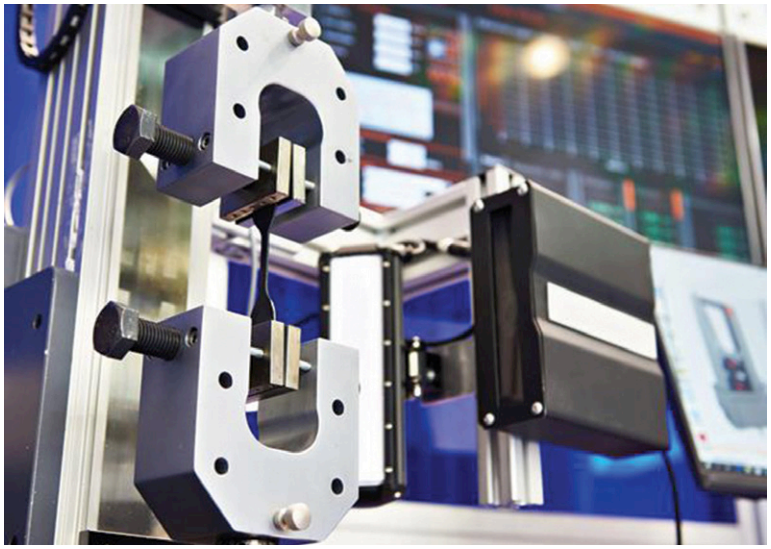
Eldridge added that graphene is able to help products be thinner, lighter, and more durable. "Companies are under pressure to do more with less material while maintaining or improving performance. Compounds with graphene offer a compelling path to achieving these goals," he said.

Graphene can also help companies achieve the goal of moving away from multilayer, multimaterial packaging that can be challenging to recycle. Furthermore, graphene can be an enabler to upgrade recycled material. "We're currently focused on applications to both upcycle plastic waste, and also to integrate our graphene into closed loop recycling systems to enable product circularity," Eldridge said.

"Our graphene can be used in packaging applications – both industrial and consumer – where it can reduce wall thickness to save weight and cost, and enhance barrier performance to improve

Main image: Small loadings of carbon nanotubes lead to performance benefits in poymer compounds

IMAGE: HYDROGRAPH



Above: HydroGraph uses tensile testing machines (pictured) to validate the effectiveness of Fractal Graphene, certify partner performance, and provide engineering-grade proof to OEMs and manufacturers in demanding industries

produce shelf life," he said. "In automotive components, it can be used in applications for structural parts where weight reduction directly impacts fuel efficiency. There are applications in fibres for strength improvement to carry additional loads, and also bearings and seals where durability improvements extend service life and reduce maintenance costs for equipment. The common thread across all these applications is the drive to use less material while achieving better performance."

Seeking partners

HydroGraph said that its Fractal Graphene is characterised by its 99.8% carbon purity and consistent morphology, and that its structure enables performance at addition rates 10 to 100 times lower than conventional graphene nanoplatelets. "Our Fractal Graphene typically achieves 20-30% increases in tensile strength and stiffness at only 0.05 wt% loading levels, enabling lighter thinner parts. Toughness can be increased from 50-70% with loading levels from 0.1%. We also see 20-30% wear reduction from 0.01% to 0.1% loading, leading to longer lasting components and products. This kind of reinforcement efficiency is dramatically superior to conventional additives and even other graphene products. Our ultra-low loading levels also preserve processability and in some cases enhance processing," Eldridge reported.

The company launched a Compounding Partner Program in July this year seeking to certify compounders to make compounds using the company's Fractal Graphene to support customers who are testing formulations in end uses including automotive and packaging.

"This initiative effectively builds supply availability of graphene compounds for the market by providing end customers with a vetted supply chain for sourcing graphene-enhanced compounds with confidence," said Eldridge. "Early partners are already piloting new formulations across automotive and packaging sectors, supporting our mission to make graphene reinforcement accessible for mainstream commercial applications."

He said that HydroGraph has also been scaling up its manufacturing capabilities. "We established a strategic relationship with a leading North American industrial gas supplier, which provides us access to high-purity acetylene – a critical feedstock for our patented detonation synthesis process. This partnership ensures continuous, high-quality supply that enables increased production volumes without compromising our industry-leading product consistency. We've also signed a lease for a new 20,000-square-foot headquarters facility in Austin, Texas, representing nearly a 100% size increase from our current operations, with operations expected to begin by February 2026," he reported.

Industrialising graphene

Black Swan Graphene is focusing on a cost-effective process to facilitate industrialisation of graphene as an additive for materials such as concrete and polymers by making graphene nanoplatelets that are five or more layers. The company partners with compounders to provide trademarked Graphene Enhanced Masterbatch (GEM) polymer masterbatches for the plastics industry. Black Swan has partnered with masterbatch producers **Hubron International, Broadway Colours** and **Modern Dispersions** and said that it is working through the GEM qualification process with other global masterbatch and compounding companies. The company said that since the launch of several GEM products in mid-2024, they are working on more than 40 joint projects.

"We are incredibly excited to see our efforts and investments culminating in significant progress toward commercialisation as our graphene gains traction in the industrial sector," said Michael Edwards, Chief Operating Officer of Black Swan. "As for many innovative products, the initial commercialisation is paramount, as progress with prospective customers and production activities can provide supply security for eventual customers. As volumes expand, not only will the company be able to compete more effectively in higher-volume applications, but lower production costs open doors to more price-sensitive markets. The path to

commercialisation success is now clearly within reach."

GEM has shown performance benefits in a range of polymers, Black Swan reported. For example, in thermoplastic polyurethane (TPU), a 1% loading of GEM allowed an approximately 20% weight reduction and a stronger part, which is now in commercial use. In polypropylene (PP), 0.2% GEM showed more than 20% higher impact resistance. In polylactic acid (PLA), less than 1% GEM improved barrier properties, with a more than 40% reduction in water vapour transmission. In a PET film, 0.2% GEM resulted in a more than 35% reduction in oxygen transfer rate, as well as increased stiffness and tensile strength.

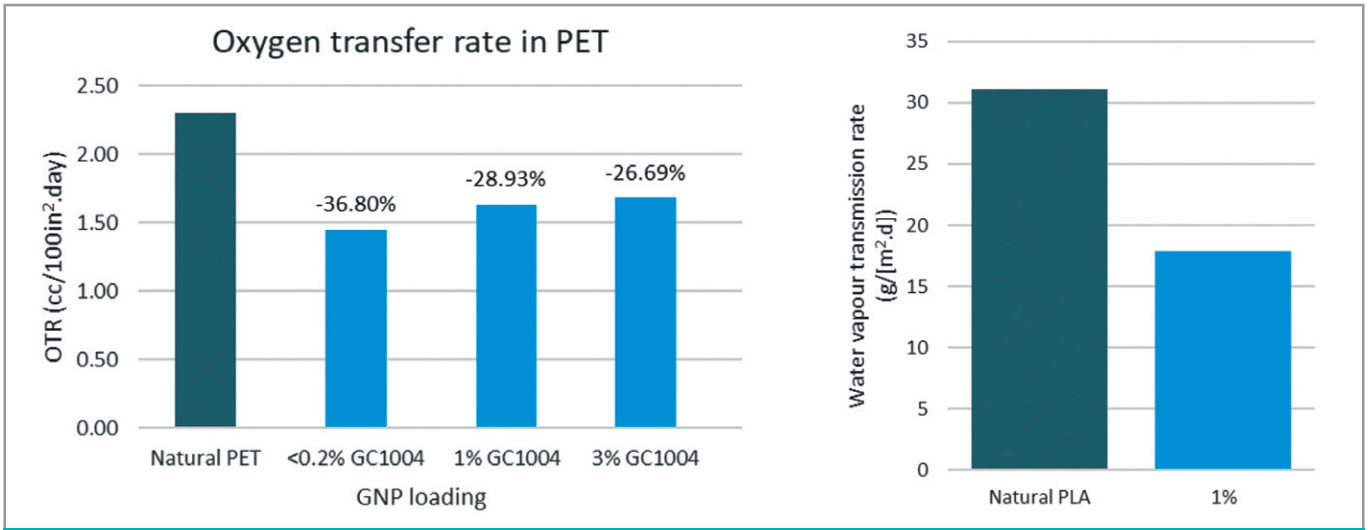
GEM is being tested in North America to enhance the strength and barrier properties of agricultural films used in crop protection (eg greenhouse films, mulch films, silage storage). The company said that it is collaborating with a number of packaging companies to use GEM to improve barrier properties of PET. Black Swan is also seeking food contact notification from the US FDA and is currently in the application process with a leading partner, the company said. Other projects are seeking to incorporate graphene into PLA to improve barrier properties for packaging as well as vehicle components. The GEM approach allows customers to try graphene in a low-cost format to see if it will succeed in their application, said Edwards.

"We are achieving exactly what we set out to prove: with the right dispersion and the right loading, our graphene products can unlock properties that matter at industrial scale. These partner-led trials validate the strength of our GEM model confirming that we can provide a reliable pathway for global manufacturers to integrate graphene seamlessly into existing production processes.

Importantly, the results demonstrate not only technical performance, but also commercial viability, positioning Black Swan to capture significant near-term opportunities as we advance toward high-volume production," said Simon Marcotte, President and CEO of Black Swan.

On the manufacturing side, Black Swan announced in June that it is undertaking an expansion to increase its production capacity to 140 tonnes/yr, which will more than triple its current capacity. An additional unit will be installed at the company's existing Thomas Swan facility in the UK.

Black Swan recently entered a distribution agreement with Ferro South Africa to distribute and resell GNPs and GEM solutions in South Africa to



Graphene improves barrier properties *Source: Black Swan Graphene*

markets including packaging and automotive.

NanoXplore, a Canadian graphene producer, has rebranded its new commercial graphene products with its xGnP trademark: GrapheneBlack xGnP D-300 and GrapheneBlack xGnP D-500, in which the "D" denotes the company's fully dry manufacturing method that does not use any liquids. The company is expanding its manufacturing capability, with additional capacity expected to come on-line in early 2026. The additives are used in a range of thermoplastics applications.

New graphene additives

"D-300 and D-500 have demonstrated proven performance in the recycled plastics market, improving mechanical properties, compatibility between mixed resin streams, and photo-resistance, especially in recycled PP and TPO, with or without mineral fillers. Independent customer testing across industries (from packaging to automotive) has also confirmed remarkable mechanical improvements at very low loadings in plastics ranging from olefins to nylons and engineering polymers," said Nima Moghimian, Vice President of Technology at Nanoxplore.

He added that the D-300 additive shows promise in polystyrene and polyurethane insulation applications, in which it provides higher R-values while maintaining compressive strength, with no processing issues. The D-500 additive has been used to provide good electrical properties and better processing than highly conductive carbon blacks and CNTs.

The latest from NanoXplore are two graphene additives currently at pilot scale. "D-700 and D-750 offer exceptionally high surface areas (700-750 m²/g), which are among the highest for industrial-grade, cost-competitive graphene. Such high surface area is particularly advantageous for applications requiring strong electromagnetic absorption, from IR-block to UV resistance and beyond," said Moghimian.

Finding applications

Nova Graphene, headquartered in Halifax, Nova Scotia, Canada, is producing its CarbonEra graphene at commercial scale in the US and is active globally in investigating applications. The company's CarbonEra Platinum graphene is made by exfoliation of graphite. Currently the process can produce 5-6 US tons per month (4.5-5.4 metric tonnes), said Paul Beasant, CEO of Nova Graphene. The graphene can be compounded into thermoplastics to improve properties such as modulus, durability, and chemical and UV resistance. Elongation in ultra-high molecular weight polyethylene (UHMW-PE) is dramatically increased, as well, said Beasant. Due to the quality of the graphene, functionalisation is not required for dispersion in thermoplastics, he noted.

Most recently, the company signed an agreement to co-develop graphene-enhanced polyethylene sheeting with **TufWrap Australia**, which provides shrink wrap solutions for commercial and industrial sectors. The graphene is being added via a masterbatch. Testing is ongoing, but it is anticipated that the addition of graphene will significantly enhance the durability of the material, which is essential for efficient use in the harsh Australian climate, said Beasant.

With a different partner in Australia, Nova Graphene is working with its additive in recycled polystyrene for a wide range of products, including rail ties. "The graphene-enhanced PS rail ties are highly UV resistant, waterproof, and termite-resistant, which is important in Australia. They offer much

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IMAGE: TUFWRAP AUSTRALIA

Above: Shrink wrap for commercial and industrial sectors is being evaluated as a possible application for graphene by Nova Graphene and TufWrap Australia. The colour of the graphene-enhanced sheeting is anticipated to be darker than the traditional sheeting pictured here but is expected to stay cooler due to enhanced thermal conductivity

better vibration control than concrete-based ties," explained Beasant. "We are working on optimising the formulation and scaling up."

Asbury Carbons has received US EPA approval to introduce its novel Edge-Oxidised Graphene (EOG) into commercial applications. The company explained that EOG (ie Edge-Functionalised Graphene), is a few-layer, lightly oxidised graphene made through a patented mechano-chemical process, resulting in a cost-efficient, high-performing material at an industrial scale. It provides the processability of graphene oxides with the performance of graphene and can benefit various applications.

The company said it can currently provide high-volume quantities (metric tonnes) of EFG in the form of active powder, dispersions (aqueous and solvent) and polymer masterbatches. A new, 17,000-square-foot facility in South Plainfield, New Jersey is being brought on-line to complement its existing R&D centre in Asbury, New Jersey.

"We are open to exploring any collaboration in high-volume applications requiring improved mechanical strength, barrier properties, flame retardancy, thermal/electricity management, flame retardancy and anti-corrosive properties in both masterbatch and slurry forms," said Daniel Tsai, Vice-President of Business Development.

Tom Nosker, Principal Investigator at the **AMIPP Advanced Polymer Center at Rutgers**, the State University of New Jersey, was recently awarded a

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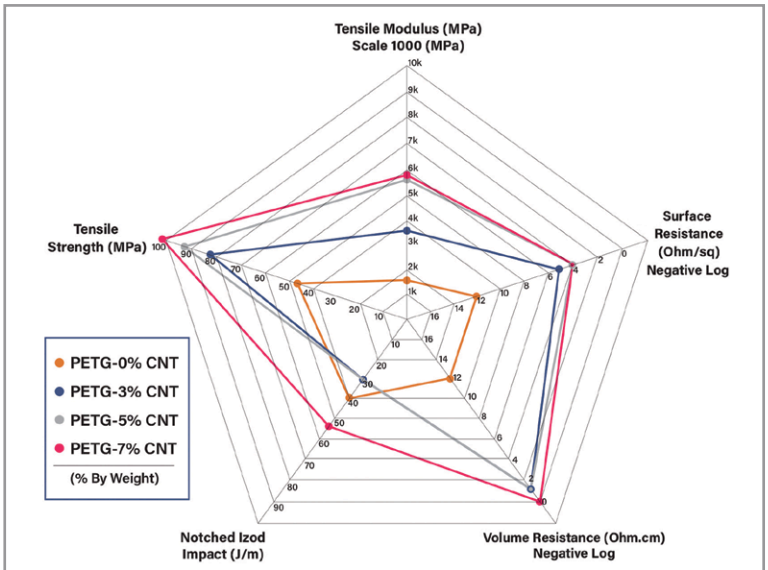

These multi-axis spider charts illustrate the mechanical and electrical properties of Insight Polymers PP and PETG 15% CNT masterbatches at loadings of 3%, 5%, and 7% total CNT loading by weight. The CNTs improve tensile modulus, tensile strength and electrical resistance with minimal effect to impact strength
Source: Insight Polymers

new US patent on "Use of graphene-polymer composites to improve barrier resistance of polymers to liquid and gas permeants". The graphene polymer matrix composite (G-PMC) packaging material is made with a patented process technology for *in-situ* (ie in a modified extruder) exfoliation of graphite into graphene to form a composite.

US-based custom compounder **Insight Polymers & Compounding** has launched a line of CNT concentrates that improve tensile strength and stiffness by 20% to 100% while maintaining impact strength, the company announced. They offer excellent conductivity at low loadings with consistent electrical properties and high cleanliness. The masterbatches contain 15% CNTs by weight and can be let down in the associated carrier materials with loadings of 2% to 7% by weight in the final compound. The first concentrates are available in PP, PETG, PA 6, PA 66, PA 12 and PPS, with more to be added to the portfolio. Custom compounds are also possible. Potential applications include electrostatic discharge (ESD) protective packaging, electronics storage bins, and conductive components in electronics assemblies. "The [CNTs'] light weight and lower loadings translate to lighter, stronger end products," said AJ Pasquale, Insight Polymers Director of Operations.

Sustainable solutions

Research in nanomaterials is ongoing at the International Institute for Nanocomposites Manufacturing (IINM) in **WMG**, part of the University of Warwick and one of the UK's High Value Manufacturing Catapult centres. IINM was founded just over a decade ago with the goal of addressing the many fundamental and technical challenges associated with the preparation of useful composites of polymers and nanomaterials and the manufacture of products from these materials using industry relevant processing techniques, said Tony McNally, professor and founder and director of IINM.

Researchers at the IINM have worked on effective dispersion and distribution of both one-dimensional (1D) nanomaterials, such as multiwalled carbon nanotubes (MWCNTs), and two-dimensional (2D) materials, such as graphene nanoplatelets, in polymer melts using twin-screw compounding. "Many of these nanomaterials are not monodisperse, contain defects and impurities and residual surfactants that must be considered during melt processing to avoid agglomeration of the nanofiller," McNally explained.

He added that in secondary processing (eg injection moulding, extrusion), the orientation of the nanoparticles or, for certain polymers, strain hardening effects due to stretching in the solid-state, can change the properties of the polymer matrix.

"Researchers in the IINM are collaborating with nanomaterial producers as well as tier one and tier two manufacturers on a wide range of fundamental and applied projects for application across several sectors," said McNally. "Sustainable solutions continue to be a major driver and motivation for improved polymeric and elastomeric materials where the addition of 1D/2D nanofillers can provide not just mechanical reinforcement but also functional properties such as greatly enhanced electrical and thermal conductivity, [which are] key targets, for example, for the manufacturers of electrical vehicles."

CLICK ON THE LINKS FOR MORE INFORMATION:

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Compounders' guide to K 2025

Materials and additives

The K2025 fair from 8 to 15 October 2025 in Düsseldorf, Germany, will once again provide a platform for the plastics industry to demonstrate the enabling power of polymeric materials to meet the most difficult global challenges. Following the preview of machinery and equipment exhibitors in the last issue, we highlight in this feature some of the producers of materials and additives and the products they have developed to be enablers of megatrends such as electrification, circularity and consumer protection.

An important platform for communicating the K2025 motto, The Power of Plastics! Green – Smart – Responsible, is the special forum in an outdoor pavilion organised by VDMA, the machinery and equipment manufacturers' association. Thorsten Kühmann, Managing Director Plastics and Rubber Machinery at VDMA, said: "Boasting an impressive 70% of international attendance among exhibitors and visitors K2025 will be the most international plastics trade fair in the world. It is the guiding star of the plastics industry providing orientation for technology development, also in view of the highly dynamic sales markets worldwide."

The trend to achieving a plastics circular economy is an important issue covered at the forum, where there will be plastic recycling and recyclate processing machines in operation among the many technologies and materials on show. The VDMA members will present their technology highlights in the pavilions. Visitors can watch live how high-quality re-granulate is made from plastic waste or how recyclates are processed into highly functional products by means of various processing methods and with the use of additives. At the same time, visitors can see how digital solutions in manufacturing also pave the way for the circular economy. In addition, the VDMA pavilion will provide ample opportunities for networking and feature a daily, themed programme on circularity, digitalisation as well as young talents and careers.

Kühmann said: "The transformation towards a circular economy is in full swing, and machinery and equipment manufacturers play a pivotal role in it as enablers. They enable the production of recyclable products and the reuse of plastic waste to produce new, high-quality products. We need plastic products in nearly all application areas of our daily lives for people's well-being. They make a significant contribution to maintaining supplies and prosperity in our world while becoming more and more sustainable at the same time."

Companies participating in the outdoor forum include: Arburg, Coperion, Erema, Lindner-Recyclingtech, Vecoplan, Wittmann Battenfeld and VDMA.

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 Compounding World.

The *Compounding 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, **Adeka** is unveiling its ADK Transparex solution for polypropylene applications. Among its benefits, the company says it offers: high transparency, with a haze value of 2.0 or more, far surpassing the market standard of 3.2, offering clarity comparable to glass, PS, and PET; sustainability, as it enables PP to replace less sustainable materials; efficient processing with superior flow properties; and safety and compliance, as it is approved by the US FDA for food-contact applications, ensuring safety across a wide range of temperature conditions.

› **www.adeka.co.jp**

Above: AF-Color will highlight its circular products at K2025

AF Color will be presenting various solutions for technically demanding plastics with a focus on its portfolio of polyketone-based masterbatches. Polyketone is known for its outstanding chemical resistance, high abrasion resistance, and excellent CO_2 balance compared to other technical thermoplastics, while the range of masterbatches offered by AF Color also offer excellent processability.

The company will also present a comprehensive portfolio of polyamide-based masterbatches characterised by high mechanical strength, toughness, and thermal resistance. The company also offers a high-performance laser additive which, in combination with a black masterbatch, enables high-contrast, precise laser markings. A highly effective blowing agent which enables a density reduction of up to 40% in polyamide components rounds off the range.

› **https://af-color.com**

A key area **Aimplas**, the Plastics Technology Centre, will showcase is the development of natural, barrier, and active polymers and coatings for packaging applications, along with the development of bio-based, biodegradable, and compostable polymers, backed by its expertise in reactive extrusion and advanced compounding. The centre will also highlight its laboratory capabilities for regulatory compliance, performance, and safety testing, as well as its support for obtaining eco-labels and leading certifications. As part of its official program, several Aimplas specialists will contribute their expertise through technical presentations and workshops.

› **www.aimplas.net**

At K 2025, flame retardant additives group **Albemarle** says its team will be present to share insights and discuss its latest advancements, including pioneering work in fire safety solutions.

› **www.albemarle.com**

Ampacet will be presenting a broad portfolio of masterbatch solutions, including the ProVital range for healthcare and pharmaceutical packaging, medical devices, and in-vitro diagnostic equipment, and per- and polyfluoroalkyl substances (PFAS)-free Polymer Processing Aids (PPA) including food compliant additives such as siloxane-free ProFlow 1485 and high heat resistant ProFlow 1611. The company says these alternatives to conventional fluorinated PPA masterbatches support compliance with new European Packaging & Packaging Waste Regulation and eliminate melt fracture, reduce die buildup, boost throughput, and support printing/lamination without interference.

Ampacet's LIAD Smart line of colour automation equipment will be demonstrated at K2025: LIAD Smart BatchSave Hybrid, which integrates the BatchSave gravimetric batch blender and ColorSave 1000 gravimetric screw feeder into a compact unit; ColorSave 1000X, a gravimetric feeder with patented SmartClean technology; Spectro PMD for analyzing granules in real-time with zero waste; and SpectroMetric, a patented in-line spectrometric masterbatch feeder combining precise colour measurement with automated dosing optimization.

› **www.ampacet.com**

At K2025, **Arkema** will showcase a wide-ranging portfolio of high-performance materials and technologies that support innovation, efficiency, and circularity across multiple industries including the Luperox range, which includes curing agents and initiators designed for efficient crosslinking and polymerization of thermoplastics, elastomers, and thermosets. Also on display will be a comprehensive range of impact modifiers, including Durastrength for durable, weather-resistant applications, Clearstrength for PVC, engineering, and thermosetting resin applications, Plastistrength to optimise PVC fusion and extrusion, and Biostrength, which enhances the performance of bio-based and biodegradable polymers.

› **www.arkema.com**

Japanese technology company **Asahi Kasei** says it has developed a groundbreaking recycling technology that enables the recovery of continuous carbon fibres from carbon fibre reinforced plastics (CFRP) used in automobiles. At the K Show, the company

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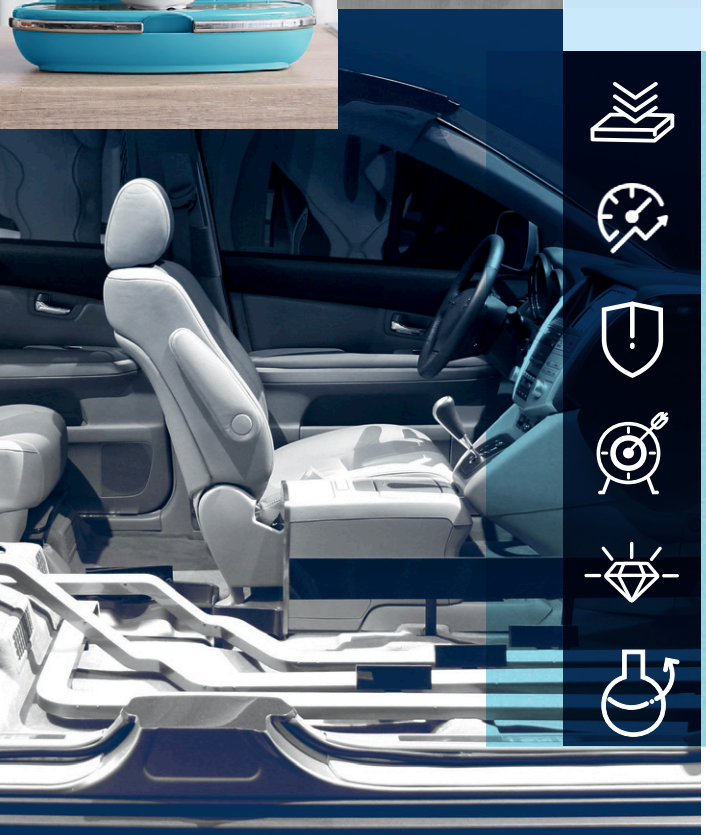

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Oct 8 - Oct 15, 2025. Messe Düsseldorf. Hall 6, Stand D61

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will showcase over 200 m of recycled continuous carbon fibre along with PA and SEBS compounds utilising a bio-based and biodegradable cellulose nano fibre (CNF). CNF reinforced polyamide becomes less viscous when agitated making it highly suitable for 3D printing applications.

In response to increasing demand for PFAS-free materials, Asahi Kasei has also developed a PFAS-free low-friction polyamide and will introduce the new grade for the first time in Europe. The company will also display the transparent polymer AZP, which addresses the challenges of conventional transparent polymers in applications with polarising light, such as Virtual & Augmented Reality devices and automotive head-up displays (HUD), while maintaining superior processability for large-scale production of injection-moulded optical components.

› **www.asahi-kasei.com**

Additive producer **Baerlocher** will once again be presenting a number of products including its Baeropol T-Blend family which helps suppress thermal degradation and gel formation. In response to tightening regulations in the EU and US federal and state legislation, the company has developed the Baerolub AID product family, a PFAS-free alternative for PPAs. The company will also showcase its Tin Replacement program which helps customers make the transition to a more sustainable alternative, ensuring compliance with REACH, RoHS, and other global regulations. Visitors to Baerlocher's booth will have the opportunity to engage with technical experts from the EU, the Americas, and Asia, with discussions focused on addressing sustainability challenges and tailoring solutions to meet specific customer needs.

› **www.baerlocher.com**

At K2022, **BASF** introduced its LowPCF and ZeroP-CF portfolios as solutions to reduce the Product Carbon Footprint by a minimum of 30% by Mass Balance Approach. At this year's event, the company intends to showcase products for which fossil resources are replaced with renewable feedstock at the beginning of the production process using the Biomass Balance approach. This helps reduce the carbon footprint of products such as Siemens' circuit breaker SIRIUS 3RV2, which uses Ultramid BMB and Ultradur BMB, along with certified compostable and soil-biodegradable biopolymers incorporating Ecovio and Ecoflex BMB.

To ensure attendees get the most out of their visit the company will be present with six different teams: Performance Materials, Monomers, Styrenic Foams, Plasticizers, Plastic Additives and TrinamiX, which makes technology to help waste sorting.

› **www.basf.com**

Part of **Benvic**'s message for K2025 is to embrace the potential of PVC and ensure it continues to be a valuable resource for generations to come. At the show it says it will display a wide range of bespoke material solutions which not only provide optimal cost and performance, but also factor in the total cost of ownership, including environmental and LCA support, backed up by Benvic's EcoVadis Gold Star rating.

› **www.benvic.com**

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Momentive Transforms Film Manufacturing with High-Performance PFAS-Free Product called Silquest™ PA-1

Momentive is driving the shift toward sustainable film manufacturing with Silquest PA-1, a breakthrough PFAS-free polymer processing aid. Specially designed for polyolefin film applications, Silquest PA-1 improves processability, eliminates melt fracture, reduces die pressure and buildup, and increases throughput—all without compromising film quality. Fully compliant with global food contact regulations, it's the smarter, safer choice for high-performance flexible packaging.

Key Features

Processability: Improves processability of polyolefin resins (LLDPE, LDPE, HDPE, PP, etc.). Easily and accurately metered in open or closed systems. No residue buildup or accumulation of processing aid on metal surfaces.

Economical: Effective at 200-1000 ppm levels. Can eliminate the need for metal stearates. Reduced wear extends the service life of existing equipment.

Versatility: Can be used as a liquid additive, as a solid formulated into a carrier resin (in masterbatches), or as an ingredient in multi-component additive packages.

Food Contact Compliance: Excellent candidate to consider for polyolefin film applications that involve food contact.*

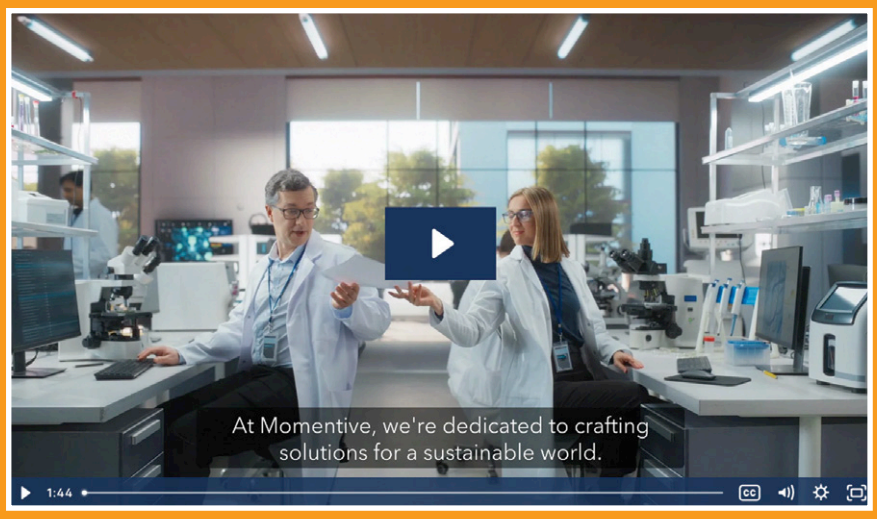
Silquest PA-1 Physical Properties:

Physical Property	Value
Physical State	Liquid
Color	Colorless
Viscosity at 25 °C [cST]	1100
Actives [%]	100
Solubility in Water	Insoluble

Typical properties are average data and are not to be used as or to develop specifications.

Process Efficiency Comparison

Silquest PA-1 and a fluoropolymer control were tested on a lab scale blown film line. Both products were used as a processing aid in LLDPE resin [1.0g/min 190°C/2.16Kg] at 1000 ppm during extrusion [letdown from a 10% loaded 10.0g/min 190°C at 2.16Kg LLDPE carrier resin]. The blown film extrusion line



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consisted of a 64mm single screw extruder [24:1 L:D ratio], 100 mm die diameter, 0.75 mm die gap, and operated with 200°C die temperature. The extruder was run continuously and the extruder pressure, barrel power, and film was collected.

Fig 1: (Below left) Extruder pressure data was collected during PPA kinetic trial run. Prior to the run, the system was purged and neat b-LLDPE was run at the prescribed operating conditions until all parameters stabilized. (Right) Summary of the end-of-run pressure and power reductions achieved by using both PPA additives* was calculated from the extruder barrel power.

By comparison to the neat LLDPE resin, we observed a 60% and 21% reduction in extruder pressure and power respectfully using Silquest PA-1 as a processing aid. Overall, Silquest PA-1 was found to have outperformed the fluoropolymer control in both categories.

Melt Fracture Elimination Study

Silquest PA-1 clears melt fracture within 40 – 60 minutes which is an equivalent performance as per industry standard. A study carried out comparing with PTFE as control on a single screw extruder with 64 mm screw diameter, 24:1 L/D ratio and 0.75mm die gap. A 0.5 MI metallocene LLDPE resin was used under 200°C die temp.

Heat Seal Evaluation

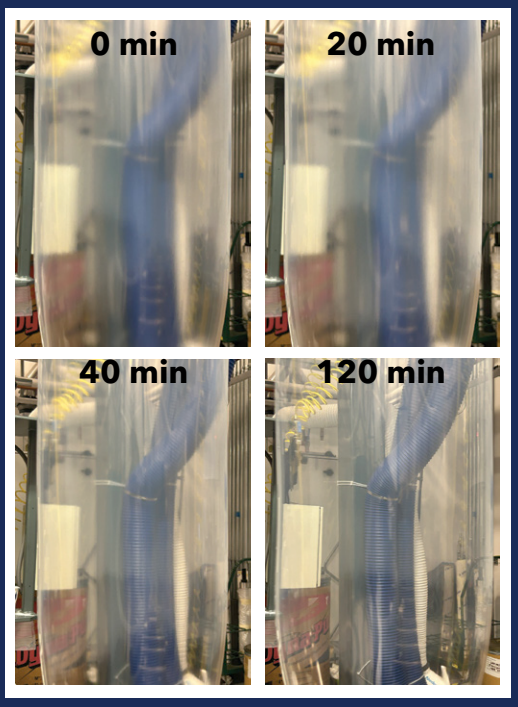
The films were sealed using a standard heat seal apparatus. The seal strength was tested by mechanically pulling on both sides of the seal. The graph below reports force normalized by the seal gauge thickness.

Apparently, there is no difference in heat seal property between neat LLDPE, and with using 2 types of PPA. This indicates that Silquest PA-1 offers the same performance as PFAS benchmark.

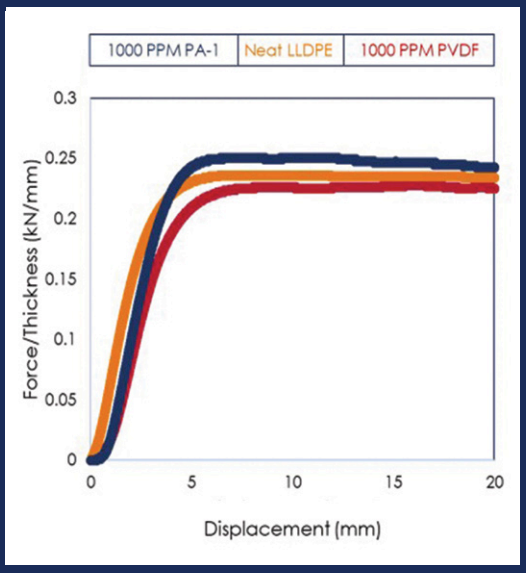
Offerings

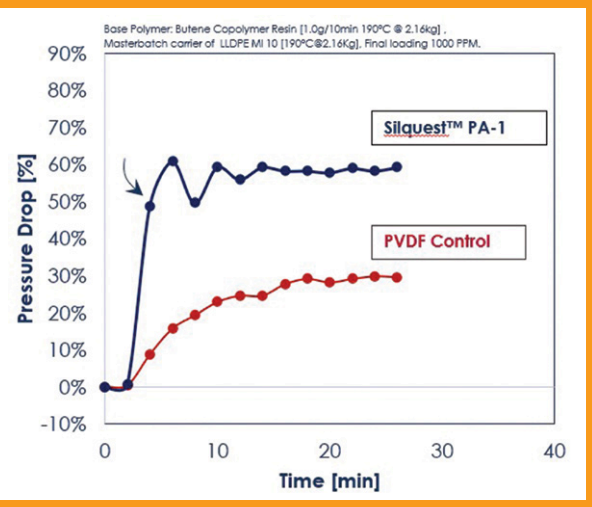
Momentive also partners closely with key customers to deliver customized solutions tailored to their specific processing needs. Leveraging the versatility of Silquest PA-1 chemistry, Momentive offers the flexibility to provide solid masterbatch formats upon request—ensuring optimal integration and performance based on individual manufacturing requirements.

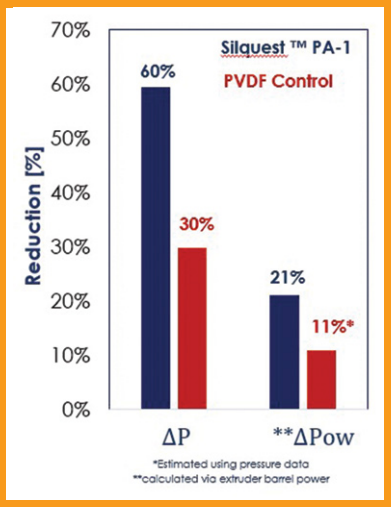
** Please contact Momentive Product Stewardship at commercial.services@momentive.com for Food Product Regulatory Information Document.*



Blown Film process stability at various time intervals.







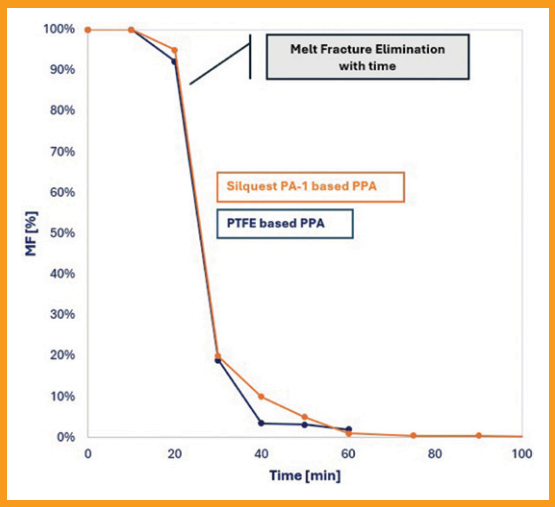


IMAGE: BYK/ADOBE

Right: Car bumpers are a target market for UV stabiliser BYK-Max LS 4128

Specialty chemical and additives supplier **BYK** will be presenting BYK-Max LS 4128, a new solution for the long-term UV stabilisation of polyamides and polyolefin composites which has been developed to preserve the properties and surface quality of plastics when exposed to light. Besides deterioration in the physical properties, this often also results in changes in colour and gloss. BYK-Max LS 4128 addresses these challenges with highly concentrated stabilisers that effectively hinder the light-induced degradation processes. In doing so, the additive acts as a radical catcher and peroxide decomposer, protecting both the visual and the mechanical properties of the materials. As an added benefit, the high level of active ingredients minimises the need for carrier resins, reducing costs for customers.

› **www.byk.com**

Brüggemann will present its expanded range of performance-enhancing additives for polyamides and polyolefins for the first time together with its Italian subsidiary Auserpolimeri. Bruggolen TP-H2217 belongs to a new class of electrically-neutral heat stabilisers developed for the requirements of E&E and e-mobility. It raises the continuous service temperature of reinforced polyamides, for example, to up to 8,000 hours at 170 °C, setting a new industry standard without compromising CTI rating and flame retardancy. Flow enhancers tailored to the requirements of various polyamide types include Bruggolen P1507 for aliphatic polyamides, Bruggolen P1810 for semi-aromatic polyamides, and Bruggolen P2201 for flame-retardant polyamides.

Brüggemann is also expanding its portfolio to include stabilisers for cross-linked PE compounds such as Bruggolen TP-H2431, a long-term heat stabiliser for applications in T3 and T4 cables supplied in pellet form, and Bruggolen R8897, a new thermostabiliser to improve the properties of PP-EPDM recyclates from front-end applications.

› **www.brueggemann.com**

Below: Covestro's digital sampling tool Imagio enables realistic digital visualization of product designs

IMAGE: COVESTRO

Ahead of K 2025, **Clariant** launched its AddWorks PPA product line, a new generation of PFAS-free PPAs designed specifically for polyolefin extrusion applications. The new range includes AddWorks PPA 101 FG, primarily focused on EMEA, Americas, and SEAP markets, and AddWorks PPA 122 G, targeted at China and SEAP regions. Both products are commercially available, offering manufacturers a timely solution as regulatory restrictions on PFAS substances continue to tighten. The formulations are also completely free of silicone and polysiloxane materials, ensuring broad regulatory compliance and suitability for food contact and food packaging applications. Additionally, these PFAS-free solutions support recyclability requirements under the upcoming EU PPWR.

› **www.clariant.com**

At K2025, **Covestro** will place special emphasis on progress and innovations in the areas of sustainable future, automotive, electronics, healthcare, and sports & leisure. Among the highlights at the booth will be a new concept vehicle for public transportation: The SUE People Mover, a self-driving urban e-shuttle developed by UE Studios. It features full polycarbonate glazing, polycarbonate for lidar sensors, as well as the lightweight and highly durable mono-material Arfinio and TPU. Also among the exhibits is the digital sampling tool Imagio, which enables realistic digital visualization of product designs, thereby replacing physical samples with digital material twins in early development phases.

› **www.covestro.com**

Domo's fully digital and interactive booth will showcase innovations across key application pillars inspired by the four classical elements: earth, air,

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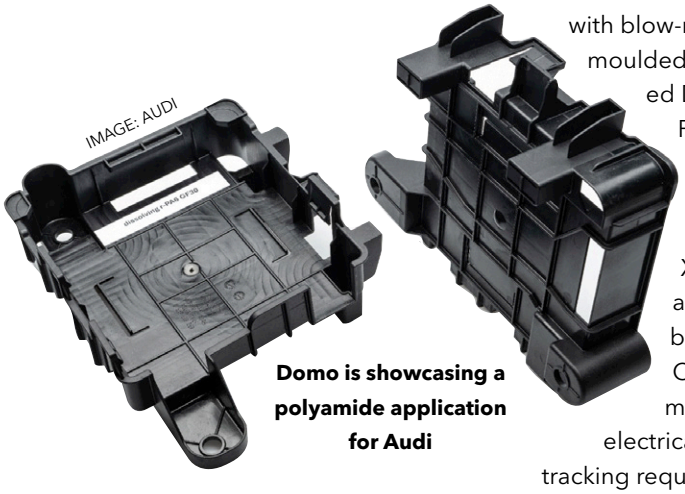

Domo is showcasing a polyamide application for Audi

fire, and water. At the stand, visitors can discover parts developed with a new physical dissolution recycling technology, which is the result of a collaborative project between Domo, Audi, and the Fraunhofer Institute. In the pilot project, both PA 6 and PA 66-based applications were successfully moulded using a 30% recycled PCR from end-of-life vehicles to meet OEM requirements. Domo will also present Domamid MBB, a mass-balanced PA 6 with up to 69% bio-attributed content and ISCC PLUS certification.

Among the applications on display will be a one-piece gas-moulded bicycle handlebar made using a Technyl compound and Siemens' first residual current circuit breaker made with sustainable Technyl 4EARTH polyamide, which contains 50% chemically recycled content.

› **www.domochemicals.com**

Envalior will present its portfolio across three industries: Mobility, Electrical & Electronics, and Consumer Goods. Reducing environmental impact will be a central theme, with applications made from bio- or recycled-based sources on display. Highlights will include a new Pocan PBT grade designed to meet the demanding requirements of high-voltage connectors in mobility as well as next-generation E&E components while supporting the upcoming transition of AI data centres to 800V HVDC power supplies, high-pressure Type IV hydrogen storage vessels made entirely from thermoplastics with blow-moulded, injection-moulded, or even rotomoulded Durethan and Akulon PA6 liners, and E-powertrain components made with Xytron PPS. Xytron solutions are also available for IGBT boards, delivering a CTI value of 600 to meet increasing electrical insulation and tracking requirements.

Also on display will be sustainable drop-in alternatives to fossil-derived grades for miniature circuit breakers, switches and connectors, including Durethan ECO (30% recycled content) and Durethan BLUE (30% pre-consumer recycled content and 56% bio-based content) halogen-free, flame-retardant PA6 grades.

› **www.envalior.com**

Eurotec is promoting engineering compounds with more than 20 polymers from PA6, PA66, PPA, PBT, PP, PC/ABS to PPS and PEEK for a very large business scope, from automotive, e-mobility, daily life (consumer and E&E) to public life. Its main portfolio includes high strength and reinforced polymers as metal replacement, impact modified, high heat resistant, oil/hydrolysis stabilized, flame retardant, wear resistant, conductive, UV resistant products. During K2025, visitors will be able to discuss competitive solutions by optimizing the cost and maximizing efficiency.

Eurotec will also present its growing range of sustainable materials using post-industrial and post-consumer recycled PA, PC/ABS, PP, PBT and PET based compounds. ECO products are demanded for critical applications at various industries with carbon footprint-reduced and "near to prime" properties.

› **www.eurotec-ep.com**

Evonik has launched the Next Markets Program to drive additional growth at


IMAGE: HPF

Above: HPF high-performance fillers

the group. The program is led by Patrick Gloeckner, who said: "The Next Markets Program builds on one of Evonik's core strengths: our presence in a wide range of markets and customer segments. By leveraging this network and combining our products and technologies with interdisciplinary collaboration among our experts, we can quickly deliver innovative responses to new customer demands." The initial focus areas include circular packaging, plastics recycling, and defence and aerospace.
› **www.evonik.com**

The **ExxonMobil** Signature Polymers brand will be featured at K for the first time. Visitors to the ExxonMobil Pavilion will be able to view product samples and film rolls, meet and hear from industry experts, and interact with solutions from a variety of industries such as packaging, agriculture, consumer products, industrial, healthcare, and automotive. Numerous solutions will be highlighted, including mono-material PE solutions designed for recyclability and/or downgauging opportunities, high-performance solutions incorporating post-consumer (PCR) recycled content, and Exxtend technology for chemical recycling.
› **www.exxonmobilchemical.com**

Bio-based plastics are increasingly being thrust into the spotlight and are a R&D focus of the **Fraunhofer Institute for Applied Polymer Research IAP**. At the K Show it will be presenting some of its many developments in the field including initial marketable products made of new polybutylene succinate (PBS) types which can be produced from regional plant-based residual materials. As part of the RUBIO project (Regional Entrepreneurial Alliance for the Development of Value Chains for Technical Bioplastics in Central Germany), around 20 new types of PBS have been developed, produced, and processed at pilot scale and are now being assessed for their suitability in a wide range of applications including packaging, consumer goods, and textiles. Together with industry partners such as Sauer and Gramß, the first marketable products have been developed in the form of a sports water bottle and a matching cap.
› **www.iap.fraunhofer.de**

FKuR will present an expanded portfolio of bio-based plastics and recyclates which have been tailored to meet the requirements of the circular economy and PPWR. Highlights will include soil-biodegradable Bio-Flex N grades and in-house developed recyclate compounds. The portfolio includes grades for blown film, injection moulding, and extrusion, all specifically developed to meet the requirements of agricultural and farming applications. All Bio-Flex N types degrade in soil without leaving any residue and do not produce persistent microplastics making them especially suitable for products that remain in nature after use such as mulch films, binding twines, growth tubes, or drainage pipes, in horticulture and agriculture.

New to FKuR's distribution program is the Paluren LDPE material. Available in pellet form, it is produced through an innovative recycling process from used beverage cartons (PolyAl) and contains around 4% aluminium flakes giving products made from it a unique appearance. The production of Paluren LDPE meets the requirements of the German VerpackG certification, as well as the RecyClass Recycling Process Certificate.
› **https://fkur.com**

HPF The Mineral Engineers is highlighting its high-performance fillers for demanding plastics. These include needle-shaped fillers such as Tremin 939 and platelet-shaped fillers such as Trefil Phlogopit which, it says, give thermoplastics excellent values in terms of mechanical strength and heat resistance.
For elastically deformable polymers such as fluoroelastomers or silicones, high elasticity of the end product is important. Products from the blocky wollastonite Tremin 283 series are recommended for use in temperature and chemical-resistant sealing rings. They increase the tensile strength and lead to excellent dimensional stability.

Increasing electrification is creating new challenges for masterbatch and compound manufacturers. It says its Silatherm products can be part of smart thermal management and are used in thermally conductive plastics.
› **www.hpfminerals.com**

Distributor **KD Feddersen** will showcase a forward-looking portfolio of engineering plastics, sustainable material solutions, and application-oriented innovations. Among the highlights will be a versatile PP portfolio from **LyondellBasell**, **Ascend**'s Starflam 500 Series of glass fibre-reinforced PA 6.6, the new E-LOOP ABS solutions from **ELIX Polymers**, MEGOL ECO (2nd Gen) and Altuglas R-Life from **Trinseo**. Poketone (PK) from **Hyosung**, a versatile polyketone with excellent chemical and hydrolysis resistance and low moisture absorption complements KD Feddersen's range. New additions include M33FG6B (30% GF-reinforced) and halogen- and PFAS-free, flame-retardant PK grades. For maximum circular economy, the company is adding high-quality recycled plastics (rABS, rPS) from **Skytech** to its portfolio.

› **https://kdfeddersen.com**

Kisuma Chemicals will present to compounders and converters of recycled plastics a range of additives and synergistic additive blends based on magnesium to upgrade the performance and consistency of their products. Significant benefits include odour scavenging and reduction, melt flow index retention, colour and yellowing index retention and gel reduction, the company says.

"As part of a major initiative to expand our portfolio, we are working closely with our customers to help them unlock the full potential of recycled plastics," said Zachary Hoffman, Business Development Lead Europe, Middle East & Africa for Kisuma. "Beyond a diversified suite of magnesium-based additives already available for this market, we are actively developing the next generation of these unique products, including tailormade solutions with functionalities engineered to boost the performance, efficiency and sustainability of recycled plastics or retain virgin-like properties. By enhancing colour, reducing odour, improving melt flow and minimizing gels, we can achieve consistent, high-quality outcomes together and accelerate the shift towards a more sustainable plastics value chain."

› **www.kisuma.com.**

Kraiburg TPE will focus on two new product series at K2025. With the new development of the FC/CM3/AD1 series it set a strong accent in the consumer industries sector, especially in food packaging. The new compounds comply with both the European Regulation (EU) No. 10/2011 and

IMAGE: KURARAY

Above: Kuraray's Parapet is a ISCC Plus-certified material for rear lamps that makes them mechanically recyclable

Title 21, Part 170 through 178 of the Code of Federal Regulations (21 CFR) of the US FDA and were specifically developed for TPE applications which may have prolonged contact to fatty foods or cosmetics. In addition to their processability in multi-component injection moulding, these compounds offer further advantageous packaging properties such as a pleasant feel and high material robustness. Another highlight promises to be compounds from the FR3 series, TPEs whose flame retardancy has already been improved in a third generation and meet all requirements of the European standard for railroad applications DIN EN 45545-2 R22 HL3 and R23 HL3. In addition to their suitability for fire protection, these TPEs also offer excellent PP adhesion and processing in standard injection moulding and extrusion processes.

› **www.kraiburg-tpe.com**

Kuraray is presenting three high-tech PMMA-based products for the automotive industry. Parapet is a ISCC Plus-certified material for rear lamps that makes them mechanically recyclable, a process previously considered unfeasible as rear lamps consist of thermally fused composite materials that are hard to separate. Kuralpha is Kuraray's new high-heat-resistant acrylic resin which can be used as a substitute for polycarbonate in automotive displays exposed to high temperatures and UV radiation such as those near the windshield and headlights. Its high resistance to scratches, UV radiation, and weather conditions, ensures long-lasting optical clarity, lens transparency, and dimensional stability of housings.

Parapure is a series of PMMA-based films for decorative applications and screens requiring high transparency. It uses a special elastomeric adhesion layer which allows the recycling of decorative film and painted car parts such as hoods, thus enabling end-of-life recycling of vehicles.

www.kuraray.com

Milliken is working with more than 30 partners at the K Show, and experts will be on hand to discuss the company's full portfolio. Among them will be the latest advancements in polymer additives and colourants and will include Millad clarifying agents which boost clarity, enable faster production rates, and reduce energy use, UltraGuard, which enhances the barrier performance of HDPE and LLDPE films, containers, and pouches, DeltaMax performance modifiers which help maximise the physical properties and processability of virgin and recycled PP, and Resist colourants which have been designed for extreme temperature processing and offer excellent thermal stability, improved lightfastness, and UV weather resistance.

In addition, Milliken Resist XTR offers an expanded portfolio of colorants, including highly chromatic oranges designed to meet the extreme performance requirements of demanding applications such as high-voltage battery connectors in electric vehicles (EVs).

› **www.milliken.com**

Mocom, part of the Hamburg-based Otto Krahn Group, will present several biopolymer-based materials for lighting applications. With the new grades Alcom LD BIO HTC and LG BIO HTC, the company says it is launching sustainable alternatives that combine high technical performance with excellent optical quality. The compounds were specifically developed for demanding applications such as light guides, bezels, or decorative interior elements in vehicles, with their media resistance successfully tested according to the specifications of a leading automotive manufacturer. The materials also meet the requirements for outdoor applications, confirmed by successful testing such as the Florida/Kalahari long-term weathering tests under real environmental conditions. In addition, the bio-based polymers offer superior resistance to chemicals and media compared to standard polycarbonate, making them especially reliable for automotive and outdoor applications.

› **www.mocom.eu**

Thermoplastic compound supplier **Modern Dispersions** says its new PFAS-free black masterbatches are targeted at the film, wire and cable, and irrigation tape markets. The company also plans to showcase its extensive product portfolio including black masterbatches, wood-polymer composites (WPC), and colour concentrates designed to meet market demands. The company has extensive colour and formulation expertise which it uses to deliver products for automotive, construction,

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packaging, film, moulded parts, and engineered plastics. The materials are used to manufacture products such as agricultural film, electrostatic dissipative housings, and household items.
› **https://moderndispersions.com**

Momentive is inviting K visitors to explore its latest silicone elastomer technologies (LSR and HCR), which it says are engineered for unmatched flexibility, durability, and flame resistance. They can also find out about PFAS-free coatings, and tap into its full portfolio of thermoplastic additives delivering proven results across diverse applications.
› **www.momentive.com**

OQ will showcase some of the 17 new polymers that it has developed over the last year, for applications in packaging, durables and infrastructure. These include: six PP impact copolymers for rigid packaging applications (including thin-wall packaging, housewares and durables), with good flow and stiffness-impact balance; and four PP random copolymers with enhanced transparency and organoleptic performance, aimed at housewares, closures, and food containers. They are engineered to meet a range of industry needs, including: packaging that helps reduce food waste and energy consumption; water storage solutions; and transparent, reusable rigid packaging.
› **www.oq.com**

Visitors to the **Palsgaard** stand will discover how its food-grade, plant-based additives offer resin producers and converters high performance combined with the reassurance of worldwide regulatory compliance. At the heart of its showcase is Einar 987, a new anti-fouling additive developed from renewable vegetable oils. Designed as a drop-in replacement for ethoxylated amines, Einar 987 is food-contact approved, effective at low dosage levels (100–300 ppm), and delivers the same reactor efficiency and product quality while eliminating toxic legacies. Alongside Einar 987, the company will highlight its portfolio of safe polymer additives, including anti-static solutions such as Einar 601 and Einar 608 PL, and anti-fog solutions such as Einar 618 and Einar 422, which help keep food packaging clear under hot and cold storage conditions.
› **www.palsgaard.com**

Plastchem will be exhibiting for the first time at a K fair, showcasing innovative and sustainable PVC solutions. It is inviting visitors to discover how it reuses PVC waste in new products. The company develops high-quality rigid and flexible PVC compounds in various colours and unique formulations. These compounds are used in applications such as cladding, gutters, air conditioning systems, sheet piling, cables, and other end uses in construction and industry. Plastchem says its presence at K 2025 highlights its commitment to shaping the future of plastics technology through knowledge sharing, new collaborations, and showcasing our latest innovations.
› **https://plastchem.nl**


IMAGE: SABIC

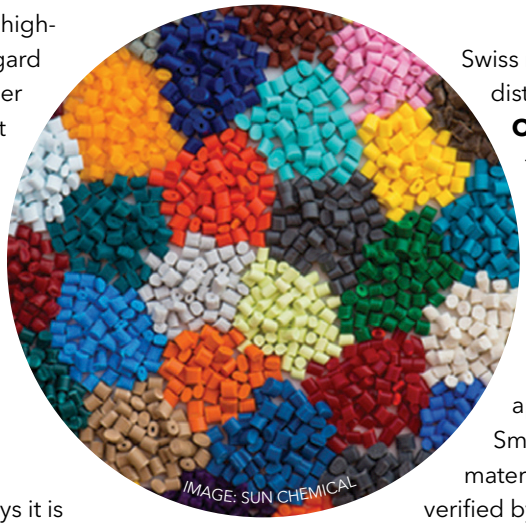
Above: Visualisation of Sabic's stand at K2025

Polyplastics will unveil its latest advancements in Durafide polyphenylene sulfide (PPS) technology and launch new materials in the Durast fine powders lineup. As part of a sustainability strategy which includes Duracircle Sustainable Solutions, the company will also unveil unique technologies including the development of bio-based p-hydroxybenzoic acid (PHBA), a key monomer for Laperos liquid crystal polymer (LCP).
› **www.polyplastics-global.com**

At K 2025, **Sabic** says it will unveil innovative solutions to help customers develop products that have an impact in everyday life, in line with its theme for the show: "Connecting Everyday Life". Among its displays, one will show materials used in the state-of-the-art appliances, consumer electronics, smart devices, advanced connectivity, 5G access and energy storage for EV mobility can support improving home life. The company will spotlight how its materials are helping to transform daily transportation, from road to rail and air. Another display on Work will explore how Sabic's materials are used to produce high-performing, durable infrastructure components, from pipes to high-voltage cables for renewable energy networks. It will also have displays on the areas Shop and Care.
› **www.sabic.com**

Featured products at **SI Group's** booth will highlight the company's commitment to driving forward-thinking solutions that support sustainable practices within the plastic and rubber industries. Products include: Weston 705, a next-generation, nonylphenol-free liquid phosphite antioxidant for plastics and elastomers; Lowinox 1790 high-performance hindered phenolic antioxidant designed for preventing spandex oxidation and degradation; Lowinox TBM6 hindered thiophenol antioxidant specifically designed for high-voltage cable insulation; Naugard BIO-XL, an accelerator with over 95% biocarbon-based content for sulphur curing of natural and synthetic rubbers; and Naugatac 1068-ULM, SI Group's latest tackifier which offers a reduced SVHC-content option and enhances tack retention in a wide range of elastomers.

› **www.siigroup.com**



Right: Sun Chemical will launch new pigments at K2025

Additives group **Songwon** says it is responding to industry requirements with an experimental product, XP2121, specifically developed for lower-quality recycled polypropylene and Songnox PQ and designed to improve the processing of recycled LDPE/LLDPE films. The company also offers customers tailored products to address various challenges such as Songsorb 5710, which is a benzotriazole UV absorber suitable for a wide range of polymers including TPU, PU foam, PVC, PVB, PMMA and PC. Elsewhere, the Songstomer TPU range offers polymer processors a wide spectrum of grades suitable for extrusion, injection moulding, and calendaring, while delivering consistent, high-quality performance with reliable processing and excellent batch-to-batch consistency. The portfolio also includes polyether grades with Shore hardness A and D that meet stringent international cable standards.

› **www.songwon.com**

Sun Chemical will present a comprehensive lineup of innovations for plastics coloration and functional effects including new pigment launches, advanced effect finishes, fibre and e-mobility solutions. A highlight promises to be the launch of Fastogen Super Red BBF, a transparent blue-shade red pigment suitable for sensitive applications and delivering high saturation with low haze, excellent dispersibility, strong heat resistance, and minimal warping in HDPE injection moulding. Also on display will be functional black pigments for heat and NIR light management, including the company's newest black pigment, Spectrasense Black 0089 FK, which offers high jetness in full shade, high NIR transparency, excellent heat stability and reliable outdoor performance. In addition, the company will be presenting a range of PPS grades designed for applications from automotive e-powertrains to drinking water systems.

› **www.sunchemical.com**

Swiss mineral producer and distributor of speciality materials **Omya** will place a strong focus on performance polymers, circularity, decarbonisation, and lightweighting. It offers pre-consumer recycled grades, including Omyaloop FC for general purpose applications, and Omya Smartfill 55-AV for engineering materials and biopolymers, verified by Bureau Veritas and produced using green electricity. These grades also reduce emissions by up to two-thirds and support compliance with EU sustainability directives.

Meanwhile, the Omyasphere 900 series of hollow glass microspheres are engineered to reduce product weight while maintaining strength making them ideal for automotive, aerospace, and electronics. Omya Performance Polymers Distribution (OPPD) combines its polymer distribution network with Distrupol.

› **www.omya.com**

The **Wacker** group will be presenting itself as a manufacturer of prefabricated components for the first time at the show. Laminates offered under the brand name Nexipal Sense consist of highly stretchable insulating and electrically conductive silicone rubber films produced using a specially developed and fully automated roll-to-roll manufacturing process. Pressure or flex movements change the electrical capacitance of the component, providing precise sensor signals for applications in medical technology, robotics, and sports. Wacker's silicone laminates typically consist of layers with a film thickness of between 20 to 200 microns characterised by exceptional elasticity, dimensional stability, and toughness. They are skin-friendly, biocompatible, UV-resistant and can withstand temperatures from 40° C to 180° C.

› **www.wacker.com**

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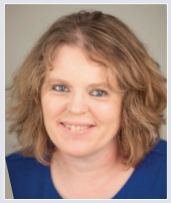

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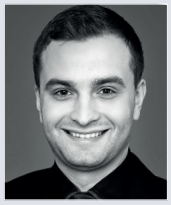

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IMAGE: SHUTTERSTOCK

Additives aim to complete the circle

*As companies strive to include more recycled plastics content in packaging and other applications, additives will play an increasingly important role, **Jennifer Markarian** writes*

The EU's new Packaging and Packaging Waste Regulation (PPWR), with its requirements for packaging recyclability and recycled content, is expected to drive innovation in and greater use of recycled plastics. The PPWR replaced the Packaging Directive in February this year, and companies are working on implementing provisions that will take effect in August 2026 and subsequent years. In addition to packaging, the EU is moving forward with rules to cover the lifecycle of vehicles, including management of end-of-life vehicles and minimum requirements for recycled content in new vehicles. Other geographic regions outside of the EU are also moving forward with recycled content initiatives.

Additives to improve the properties and processing of recycled plastics will play a key role in enabling companies to meet minimum post-consumer recycled content (PCR) requirements in various applications and polymer types. Depending on the recycle stream, PCR can have higher flow variability than virgin plastics and may also contain degraded polymer or contaminants. Additives can counteract degradation, smooth out flow, and compatibilise contaminants to mitigate negative effects, among other benefits.

Because polymers can degrade when they are exposed to heat and shear during reprocessing, as well as to harsh conditions during use in their initial life, stabilisers that protect the polymer chains from degradation are crucial. **Baerlocher** says that its Baeropol T-Blends are customised for specific applications with stabilisers as well as other functional additives and are available in a 100% active, dust-free pastille form for easier handling than powders. Alternative forms, including granules and masterbatches, are also available. ›

Main image: Additives such as stablisers can provide the missing piece of the puzzle when using recycled plastics

Cleanfarms, a Canadian agricultural recycling program provider, is working with BASF on recycled content in packaging

IMAGE: CLEANFARMS

The company said that in reprocessing of recycled polyethylene (rPE) film, a Baeropol T-Blend is designed to be fed directly into a cutter-compactor unit. The additive has been shown to allow fewer gels and fewer bubble breakages during film processing. The company said that another T-Blend improved processing of recycled high-density PE (rHDPE) for extrusion blow moulded packaging.

BASF's Irgastab range are advanced stabilisation solutions for specific conditions. The additives can be used in recycled polymers, where they can act as a thermal stabiliser to provide long-term durability, a processing stabiliser to protect the polymer during processing, and as a nucleating agent to increase crystallisation temperature and improve mechanical properties. At the K2025 show, the company plans to highlight a closed-loop agricultural packaging initiative that uses Irgastab to boost recycled content in a package for herbicide made from recycled agrochemical container plastics. Partners in the project are **Cleanfarms**, a Canadian provider of end-of-life packaging management in agricultural plastics, and **McKenzie**, which provides bulk containers for agricultural and industries chemicals.

Dover Chemical has expanded its Doverphos LGP-12 line into a broader platform of solutions for recycling and film extrusion. "We see strong adoption opportunities across packaging, film, and moulding applications as converters and brand owners push for higher recycled content without sacrificing performance," the company said.

Doverphos LGP-12 is a proprietary liquid polymeric phosphite antioxidant with a high molecular weight structure (>1,500 MW) that reduces additive migration compared to legacy stabilisers with lower molecular weight (200–900 MW). Beyond stabilising against thermal and oxidative degradation, LGP-12 also functions as a PFAS-free processing aid, reducing melt fracture, minimising die lip buildup in blown film, and reducing plate-out in cast film extrusion. "These dual benefits deliver stable melt flow, extended run times, and cleaner surfaces [without buildup] – especially valuable in PCR [or] PIR [post-industrial recycled] applications," the company said.

DoverClear is a PFAS-free, silicone-free line of polymer process aids and gel reducers designed to improve both optical and mechanical performance in LLDPE/LDPE extrusion. "DoverClear products enhance clarity, eliminate melt fracture, reduce die lip buildup and plate-out, and cut gel formation – resulting in smoother films, fewer defects, and less downtime for cleaning," the company said.

Additive platform

DoverCycle is the company's newest branded additive platform for upcycling recycled-content polyolefins, especially streams with high levels of PIR and PCR. "By combining proprietary additives (including LGP-12) with converter-focused technical support, DoverCycle enables better MFI [melt flow index] retention, fewer gels, and improved recyclate quality, making higher recycled content feasible without sacrificing performance," the company reported. The products are available in neat blend or masterbatch formats, tailored for both US and EU markets.

Italian plastics additives company **Greenchemicals** acquired additives producer Polichem in November 2024. The acquisition included Polichem's production site, analytical facilities, and application lab in Garlasco, near Milan, complementing Greenchemicals' headquarters in Desio, Italy. The move gave Greenchemicals additional products for mechanically recycled polymers, including Polichem's high-performance stabilisers. Other types of additives from Polichem for recycled polymers include nucleating and clarifying agents, mould release agents, impact modifiers, chain extenders for polyamide (PA), intrinsic viscosity (IV) enhancers for PET, and dispersing molecules.

Brüggemann introduced Bruggolen R8897, a new thermostabiliser designed to improve the properties of polypropylene (PP)-EPDM recyclates from front-end applications. "As the benchmark in its class, it is based on an innovative chemical concept that ensures excellent retention of mechanical properties during long-term heat aging. Laboratory tests show an improved level of residual Charpy impact after long term heat aging," the company said. ›

Compatibilisers

New technologies for compatibilising dissimilar materials in compounds with recycled content have been discussed in detail in previous articles (see *Plastics Recycling World* May 2025 issue).

Compatibilisers can be used to enable recycling of multimaterial, multilayer edge trim back into multilayer films, for example. The Polarfin PD41 diblock copolymer compatibiliser from **Interface Polymers** can be used in this type of multimaterial, multilayer film application to disperse PA or EVOH into a PE matrix. The company scaled up production earlier this year and has formulated a master-batch product for large-scale customer trials.

Lotader recycling agents from **SK Functional Polymer** include products used for compatibilising EVOH with PE. Other compatibilisers are in development for compatibilising small amounts of PE contaminants in a PET or PA 6 recycling stream, to prevent property degradation.

Compatibilisers and coupling agents are also used to enhance reinforcing fibres or fillers in a polymer compound and can be particularly important for compounds with recycled content. **Tisan Engineering Plastics** said that its EcoStar brand includes PA with PIR content and PP with PIR or PCR content; both PA and PP compounds use a variety of reinforcements or fillers to improve mechanical and processing performance.

"The most significant challenge in working with recycled polymer materials is the raw material's instability, because of impurities in recycled polymers [that] can cause poor polymer-fibre interface adhesion and surface problems, which can lead to poor thermal and mechanical performance," the company said. The company uses compatibilisers to prevent these problems by providing better adhesion between polymers and fillers. The Olebond 7401 PH3 compatibiliser is specifically developed for PP-based compounds. Olebond 7403 OE2 is suitable for PA-based compounds containing recyclate and can increase impact properties.

The US **Association of Plastic Recyclers** (APR) and the EU's **RecyClass** organisation support recyclability through test methods that evaluate whether a plastic product is recyclable. Additives for recycled materials can also be evaluated and recognised, so that processors can consider the information when choosing material formulations. Various existing commercial compatibilisers have been evalulated and recognised as not interfering with recycling at certain levels in given polymers. For example, last year, **Kraton's** CirKular+ C1000 and C1010 Compatibilisation Series and CirKular+ C2000 Performance Enhancement Series received Critical Guidance Recognition from APR for use in PE flexible films. CirKular+ additives had previously received the APR Critical Guidance Recognition for use in PP containers and HDPE bottles and had been certified as compatible with HDPE and PP container recycling in Europe by Plastics Recyclers Europe and the RecyClass system.

The **European PET Bottle Platform** (EPBP) offers

IMAGE: AVIENT

Right: ColorMatrix Amosorb Oxyloop-1 from Avient is an oxygen scavenging additive which is accredited for coloured PET bottle-to-bottle recycling

recycling design guidelines specifically for PET bottles to support a circular economy for the European PET value chain. EPBP has created test procedures to assess impact of technologies on rPET properties and established recycling processes. For example, materials, including additives and any non-PET components in a bottle, can affect colour, clarity, mechanical properties and processing. One protocol looks at basic recyclability (ie collection, sortation, reprocessing) using established recycling technologies. As the circular economy evolves, bottles will need to withstand multiple-loop recycling. A Circularity Evaluation Protocol, updated in July 2025, assesses whether a PET package can be recycled multiple times. The focus is on bottle-to-bottle recycling. A previous protocol for bottle-to-fibre is no longer considered an option.

Scavengers and barriers

Avient's latest is ColorMatrix Amosorb Oxyloop-1, an oxygen scavenging additive specifically formulated for use with up to 100% recycled PET (rPET). The new technology is EPBP-accredited for coloured bottle-to-bottle recycling. Avient said it also increases quality in transparent rPET. The technology is non-nylon based and has no scavenging delay or deactivation, Avient said. It is intended for low-to-medium term shelf-life applications, including juices, oxygen-sensitive vitamin drinks, ready-to-drink teas, and certain dairy products.

Ultraviolet (UV) light-blocking additives may be used in PET bottles to protect the contents in

packaging of light-sensitive liquids, such as beverages or personal care products. Some of these additives have been tested to ensure that they do not interfere with recycling processes, using the EU RecyClass Recyclability Evaluation Protocol for PET bottles or a similar protocol in the US from APR.

Last year, three of Avient's UV barrier additives for PET bottles were granted Recyclass Recyclability Approval, establishing that the additives do not cause yellowing after recycling, which is important for maintaining high quality in unpigmented PET. The formulations are Cesa Light Additives FEA0050148, Cesa Light Additives FEA0050249, and ColorMatrix Ultimate UV 390-1 Light Barrier for PET.

Repi's UV absorber formulations REMAP 00395 and REMAP 00561 also received a RecyClass Recyclability Approval in late 2024, indicating compatibility for PET recycling in Europe. Most recently, Repi's UV Absorber Remap 00669, which is designed for the US market, has been recognised by APR for use in PET.

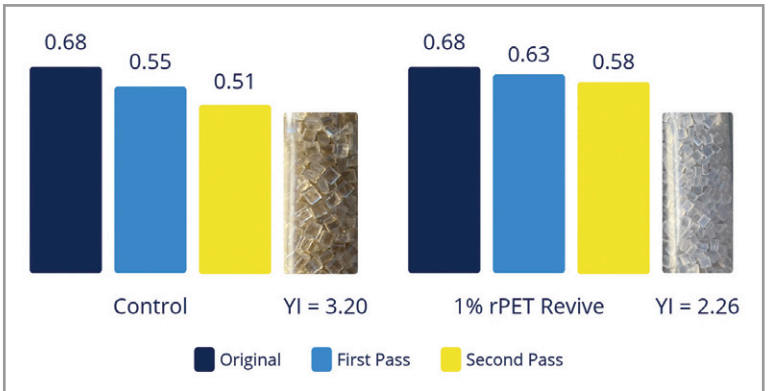
Cargill IncroMax 100 additive improves polymer flow in injection stretch blow moulding of both virgin and rPET preforms and bottles. IncroMax 100 is a low-dose additive compounded into the plastic that migrates to create non-plasticising flow improvement to help eliminate uneven mould fill in complex design features, such as corners and handles, explained Nathan Noyes, Category Marketing Director, Polymer Additives, at Cargill. He said that the additive allows lower temperatures and pressures during moulding. Due to more uniform stretching, the additive also increased top load strength in up to 100% recycled PET.

Chain extender

Polyvel said its ReVal line of additive masterbatches is designed specifically to assist with recycling various polymers. The latest from the company is rBoost PET Chain Extender, which increases the IV and impact strength of rPET as well as reduces the yellowness index of rPET. The additive can also maintain the IV of virgin PET after numerous passes, the company reports.

Techmer PM's HiTerra rPET Revive, first introduced in 2023, increases the IV of PET, which can allow higher levels of recycled content. New data from Techmer PM demonstrates how 1% of rPET Revive helps maintain IV through multiple heat histories.

Also new from Techmer PM is HiTerra EvacuTech, a contents-release additive technology that can be tailored to maximise the evacuation of specific viscous liquids in a package. It facilitates recyclability and reduces contamination in the recycle stream due to cleaner packages, the company said.



HiTerra rPET Revive from Techmer PM helps maintain IV in a multi-pass extrusion study. The image on the right of each graph shows that 1% of the additive helps maintain colour, with a lower yellowness index (YI) than the control
Source: Techmer PM

Swedish company **KD Feddersen Plastics Machinery**, which distributes engineering plastics and supplies plastics and recycling equipment, announced that Emma Söderhjelm, the company's Quality Manager, has begun a PhD project studying the degradation processes and recyclability of polyamides at the Polymer Technology Institute (PTI), Värnamo, Sweden, funded by the Swedish Wallenberg Initiative Material Science for Sustainability (WISE) through the Knut and Alice Wallenberg Foundation. The project brings an industrial perspective to the research and will investigate the chemistry of chain extenders and their effect on recycled material, said Söderhjelm.

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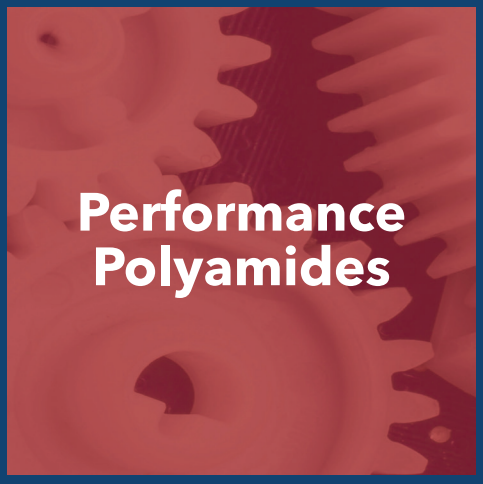

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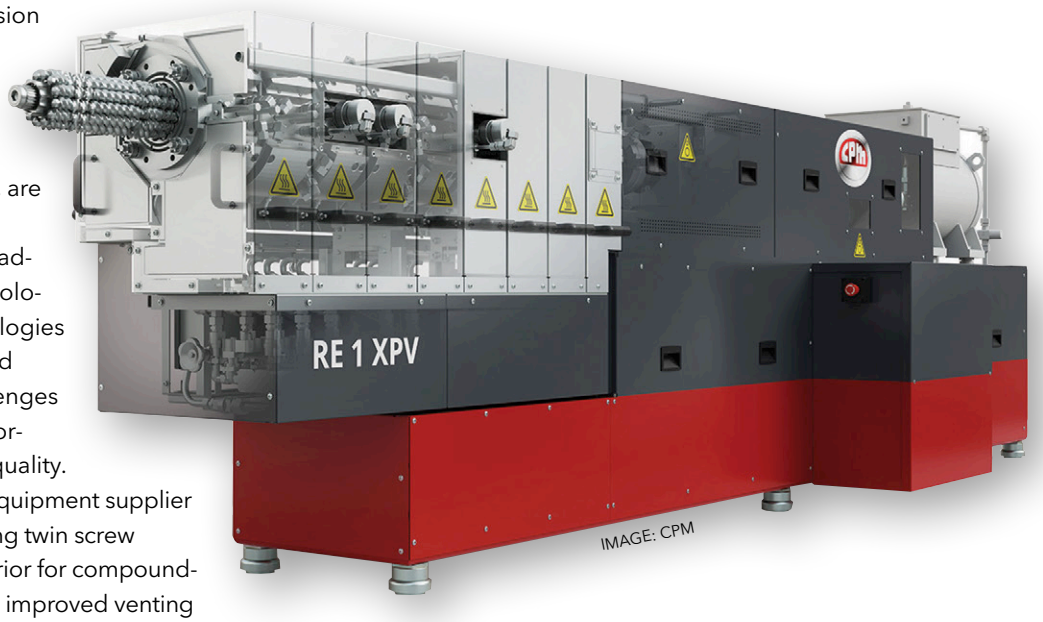
Processing with alternative technologies

The twin-screw extruder is the workhorse of the compounding industry, but single-screw extruders and other technologies can be more suited to certain materials and processes. By Chris Saunders



Main image: CPM's Ring Extruder Technology offers enhancement in elongational flow through the multiple intermeshing apex regions

Conventional twin-screw extrusion remains the industry standard for most compounders, but issues such as rising raw material and energy costs, and the increasing use of recyclate, are leading to developments in single-screw extruders, co-kneaders and other alternative technologies. Developing these technologies represents a critical step toward addressing sustainability challenges while enabling enhanced performance and ensuring product quality.

According to US extrusion equipment supplier **Entek**, the reason the co-rotating twin screw extruder is considered so superior for compounding recycled plastics is because improved venting capabilities help remove volatiles, contaminants, and moisture. A screen changer offers added versatility and through Entek's patented VFT technology, air can be extracted from fluffy fillers inside the extruder to increase throughput rates. An early atmospheric vent is especially useful to mitigate hydrolysis with plastics like polyamides, polyesters, polyurethanes, and polycarbonates that are susceptible to hydrolysis, and a vacuum vent is employed later in the process after the plastic is melted to devolatilise the materials and remove moisture and air.

In a co-rotating extruder, both screws rotate in the same direction so the material is pushed along between the screws, spreading particles throughout the melt and creating a uniform blend. But in a counter-rotating extruder, the screws rotate towards each other. The material is trapped in C-shaped chambers and is pushed forward more like a positive-displacement pump so it is better at dispersive mixing.

While co-rotating twin-screws have become the default for many compounding tasks, co-kneaders, low-shear rotating and reciprocating single-screw extruders, retain an edge in the low-temperature compounding of highly filled or temperature-sensitive systems (such as HFFR and certain PVC grades), where the mixing mechanism needs to achieve effective dispersion without excessive melt temperature or fibre/filler damage. For these reasons, they occupy a sweet spot between traditional single-screw extruders and co-rotating twin-screws, and remain a mainstay in cable compounds, PVC, and other demanding applications.

Chinese company **Xinda**, which began as a masterbatch producer in 1988, now manufactures both co-rotating and counter-rotating twin screw extruders, but is best known for its co-kneaders, saying they are the preferred choice for many compounders as they often offer lower energy input and melt temperatures, facilitating more homogenous mixing with no shear spikes and equal treatment of the polymer matrix. They also present a high degree of self-wiping and dispersive mixing without destroying delicate fillers, and enable high volumetric loadings of fillers and additives. Explaining why they are so consistently

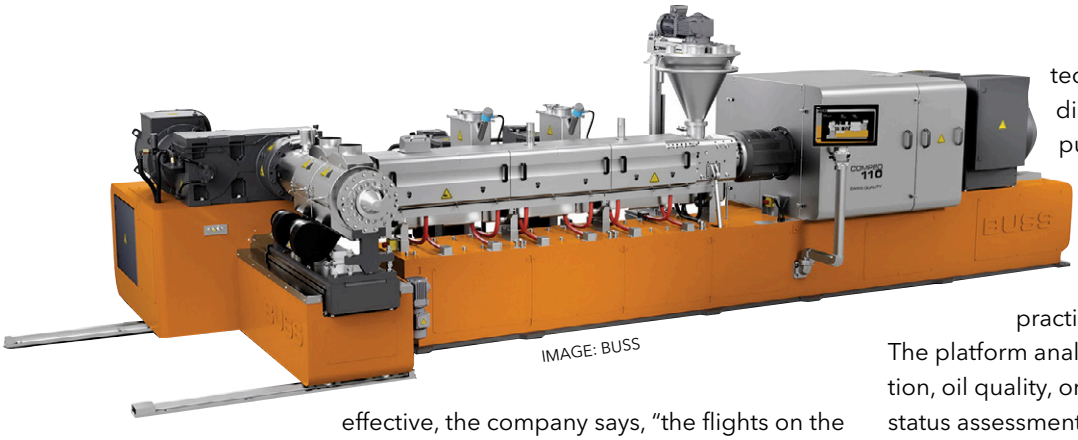


IMAGE: BUSS

Above: The modular concept of BUSS compounding systems allows optimum matching of the individual process parameters

effective, the company says, "the flights on the screw are interrupted and interact with three rows of stationary kneading pins located in the barrel wall. The interaction between the moving flights and the stationary pins provide dispersive and distributive mixing simultaneously."

A patent for the original co-kneader was filed for Swiss company **Buss** by Heinz List on 20 August 1945, and was eventually granted five years later, meaning the patent filing just had its 80th anniversary. This is testament not just to its longevity, but also its continued relevance. The original patent was based on a unique compounding principle which involved an axially reciprocating and rotating screw with stationary pins in the kneading barrel. During this process, the material is not only sheared between the pins and kneading flights, but also inverted. This is in contrast to traditional single or twin screw extruders. The central element in the kneader housing is a temperature-controlled, oscillating screw shaft which mixes and kneads the raw materials while a two-piece, hinged housing allows easy access to the process sections ensuring fast cleaning and easy recipe changes. The modular design also allows flexible adaptation to different production requirements.

One of the co-kneader's key advantages is the separation of compounding, pressure build-up, and pelletising. A practical example is the production of wood-fibre filled HDPE with a wood fibre content of around 55%. A particular challenge with this material combination was the optimisation of feeding and degassing using a flexible kneader in different configurations. Extensive testing compared different degassing methods to determine the exact point and amount of wood fibre to be fed at low temperatures and under low pressure to avoid damaging the wood fibre.

The original co-kneading technology is still considered a foundational development in compounding, and Buss has continued to adapt to meet evolving requirements. In addition to the kneader itself, the company offers the necessary flexibility for customer-specific applications and different process requirements with downstream technical extensions such as discharge extruders, discharge pumps, screen changers, and pelletising systems.

One of its latest innovations is SenseHub, a digital platform which turns machine data into a practical tool for data-driven decisions. The platform analyses sensor data such as vibration, oil quality, or torque in real time and provides status assessments via a health score. Deviations are recorded and displayed allowing preventive measures to be taken at an early stage which reduces maintenance costs and cuts downtime.

New advances

In September, **Farrel Pomini** revealed that its Compact Processor, a Farrel Continuous Mixer (FCM) combined with a single-screw extruder on a unitised frame, facilitates more efficient production of outdoor decking using wood-plastic composites (WPC) as it eliminates the need for pelletising before compounding. Central to this capability is Farrel's grooved extruder equipped with vacuum venting which ensures efficient conveying and stable pressure for consistent, high-quality board extrusion, while effectively removing residual moisture.

Making a WPC can be challenging because wood flour is a fluffy powder with a relatively high moisture level of about 5% to 6%. Using recycled polymers adds another element of complexity as it is difficult to feed and achieve a homogeneous mixture. Traditionally, wood flour is first pelletised in a milling process that requires large, costly equipment with high maintenance costs. The Compact Processor eliminates this step by directly receiving fluffy wood flour, along with recycled material, through its large feed port at high throughput rates. In the mixing chamber, the combination of large free volume and low shear ensures excellent distributive mixing and high output without overheating or scorching the material. A stock cutter at the mixer discharge cuts the extrudate ribbon, facilitating smooth feeding into the downstream hot-feed single screw extruder.

Extrusion line manufacturer **Battenfeld-Cincinnati** says it is aiming to meet the unique demands of modern resource management with the new BC 120-40 DVT single-screw extruder. Billed as the first extruder featuring Dual Vent Technology (DVT), it will also be on display at K2025. One of the more obvious innovations is that whereas degassing connections were once located directly next to each other and served to increase the overall degassing capacity at a single area, DVT creates two independ-

ent degassing areas along the extruder's processing unit. "Combining our expertise within the group, we have succeeded in developing an innovative concept that combines two separate degassing zones on one screw," explained René Hartmann, Regional Sales Manager at Battenfeld-Cincinnati.

The development means volatile substances with low partial pressure can be effectively removed from the melt in the first intensive degassing zone, while those with higher partial pressure can be removed in the second. This enables the removal of significantly more moisture and volatile components from the melt and ensures higher product quality by preventing bubble formation.

"For the processing company, this reliability means, on the one hand, that it hardly needs to pre-dry its material, thus saving on equipment and the associated acquisition and energy costs. On the other hand, the new double degassing extruder allows them to use untreated residues and regrinds," said Hartmann, explaining the increased flexibility in terms of material use. With this development, Battenfeld-Cincinnati is initially focusing on ABS processing but depending on the material and vacuum technology other functions such as the removal of odours are also possible.

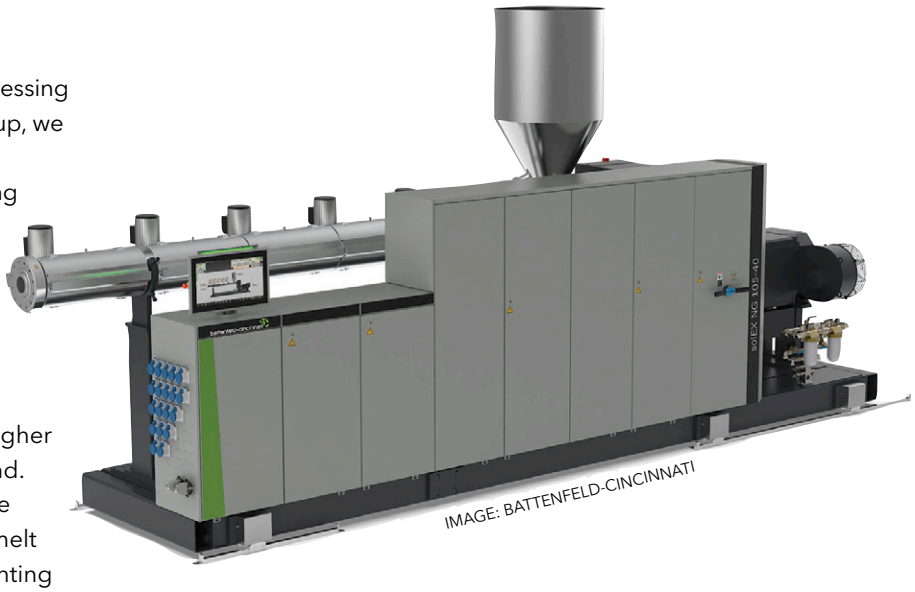


IMAGE: BATTENFELD-CINCINNATI

Above: The SolEX NG 105 completes the series of Battenfield-Cincinnati's most powerful single-screw extruders

Also premiering at the K Show will be Battenfeld-Cincinnati's SolEX NG 105 model, which completes the series of the company's most powerful single-screw extruders and provides a further optimally matched size level. Previously, the series comprised the 45, 60, 75, 90 and 120 models, with the SolEX NG 105 filling the gap

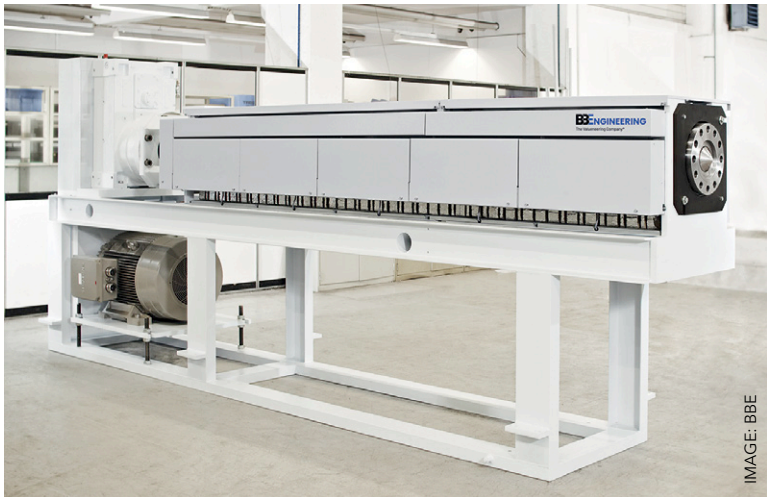


IMAGE: BBE

Above: The BBE single-screw extruder is particularly well suited for demanding applications in film production, synthetic fibre spinning, and high-quality PET recycling

between the two large models. The 105 machine with a length of 40D, which covers a range from 1,680 to 2,100 kg/h, offers all the familiar features of previous models and also includes valuable new features. For example, whereas previously the extruder was usually supplied with water for cooling from the service pipe in the processing plant, the new model has its own internal supply. This limits impurities and ensures the supply maintains constant, which increases the lifespan of the engine and gearbox.

"The extruder's own water circuit is so convincing that we will be providing it for all our models in future," said Heinrich Dohmann, Director Mechanical Engineering. In addition, all SolEX extruders of the New Generation (NG) have a processing unit consisting of an internally grooved barrel in combination with a matching crew and grooved bush geometry, resulting in process advantages such as a reduced axial pressure profile, high specific output rates at low screw speeds, gentle but effective and homogeneous melting performance, and subsequently reduced energy costs. Compared its predecessor, the NG models achieve around 25% higher output when processing HDPE and even up to 40% higher output with PP.

Another company with a presence at K2025 is **BBE**, whose single-screw extruders are suitable for a wide range of polymers such as PP, PET, rPET, PA, and PE, and are particularly well suited for demanding applications in film production, synthetic fibre spinning, and high-quality PET recycling. With screw diameters ranging from 30 to 360 mm, the systems cover a wide processing spectrum and enable throughputs of 3 to 6,000 kg/h, depending on the material and process requirements. In addition to single-screw extruders, the company also offers extrusion cascades for high output rates.

CPM's Ring Extruder technology offers enhancement in elongational flow through the multiple intermeshing apex regions due to the multi 12-shaft intermeshing design concept. This design concept incorporates a higher frequency of elongational flow and improves the efficiency of mixing via elongational deformation. The complexity of raw material components in compounding often results in incompatible surface chemistry as well as potential viscosity phase disparity. This is where elongational flow and deformation distinguishes itself from simple shear flow and deformation allowing for a more efficient mixing process, says CPM.

The company says its multi-shaft Ring Extruder design with a higher frequency of elongational flow results in a more efficient mixing process with a lower overall energy input into the material system. For example, CPM has validated an average reduction of 35% specific energy input on the Ring Extruder in comparison to a comparable co-rotating twin screw extruder for processing PET.

Homogenisation

Austrian company **Erema** is branching out from single-screw to twin-screw extrusion with its new TwinPro, which aims to combine the advantages of a twin-screw extruder with the strengths of the company's preconditioning unit (PCU). Working closely with customers, the company has developed a solution adept at recycling production waste consisting of demanding multi-layer films while also opening up new possibilities for thin-walled post-consumer regrind.

A key feature of the TwinPro is its highly efficient homogenisation. The first stage takes place in the PCU, which heats, dries, compacts, and buffers the input material. Thanks to Erema's patented Counter Current technology, the extruder, coupled at a tangent to the PCU, is continuously filled with heated and pre-compacted material. Even with low bulk density material like film waste, the PCU is able to deliver full throughput and covers a wide bandwidth of input materials with bulk densities of 30 to 800 g per litre reliably processed in a single step without the need for separate agglomeration, weighing, or a stuffing unit.

The company is also upscaling the Intarema series and launching the 2021 model without a cascade at K2025. Counter Current technology continuously feeds the extruder with preheated material significantly warmer than with conventional systems. This is a technological advantage, especially for an extruder screw with a large diameter with correspondingly deep screw flights, as the melt is processed more gently with less shearing and without additional particle size reduction making it easier for impurities to be

extracted by the melt filter.

Founded in 1977, US firm **Randcastle** built a reputation for innovation in polymer extrusion before recently changing its name and rebranding to **The Screw Company** to better reflect a renewed focus on revolutionising polymer processing through screw technology, most notably the Molecular Homogeniser (MH) screw. "For decades, we've pushed the boundaries of what a single screw can do," says Keith Luker, inventor of the MH screw and President of Randcastle. "This rebrand tells the industry exactly who we are and what we're best at: screw design that fundamentally improves polymers."

While most of the polymer industry has focused on machines, materials, and additives, Randcastle has zeroed in on the screw, which it calls 'the true engine of performance'. The company says its MH screw delivers compression-free mixing, reducing degradation, and producing 'unmatched' homogenisation. This enables high output at low temperature and permanent property improvements to polymers, including increased elongation at yield, higher impact resistance, improved clarity, greater moisture absorption (or reduced permeability, depending on material), and stable extrusion without pre-drying. Unlike some other screws, the MH is engineered to process polymers gently and thoroughly, avoiding stress concentrations that can lead to yellowing and mechanical failure. In a presentation at the 2025 Plastics Technology Extrusion Conference in Boston, Massachusetts, Luker said, "We're not just building extrusion lines, we're making screws that make polymers better."

Direct compounding

KraussMaffei says its new Chopped Fiber Processing (CFP) technology enables separate dosing of PP and glass fibres in the injection moulding process for the first time. Both can be supplied directly via the machine's conveyor system, homogenised, and processed with the help of the new CFP screw. This means no fibre clusters are formed during processing, ensuring optimum component properties at reduced cost. The technology enables plastic processors to individually dose and mix polymers and fibre and allows them to develop their own formulations for components and build up material expertise, giving them a targeted competitive advantage

IMAGE: SABIC

Right: Sabic's new Megamolding platform enables the manufacturability of large thermoplastic parts

(also see *Compounding World* September 2025 issue). At K2025, visitors will be able to experience the CFP technology on a GX 650-4300 injection moulding machine with an LRXplus 350 linear robot in the production of a complex, functionally integrated tailgate component.

In another development that could have wide-ranging benefits, **Sabic** has introduced Megamolding, a new platform designed to enable the manufacturability of large thermoplastic parts. By combining the company's materials science expertise with the technical knowledge of various value chain collaborators, the company says this can potentially enable faster, more cost-effective, and sustainable manufacturing solutions compared to traditional approaches. While thermoplastics have long been used in manufacturing, cost, complexity, and processing challenges have limited their application in large components. Megamolding addresses these barriers by providing scalable, high-performance solutions that enable greater design freedom and efficiency.

Sabic says the platform's benefits include: enhanced cost and process efficiency by using competitive tooling, consolidating parts, and simplifying manufacturing, post-processing, and assembly steps, faster injection moulding cycle times versus metal casting or thermoset processing, greater design freedom to achieve more complex geometries and functional integration, simplified product architecture with better designs for disassembly, sorting, and recycling, weight and mass reduction while meeting strength and stiffness requirements, and lower carbon emissions, enabled by improved processing efficiency.

Sami Al-Osaimi, Executive Vice President, Polymers SBU at Sabic, said: "With decades of success in materials innovation, Sabic is uniquely positioned to collaborate with industry partners across value chains to redefine what's possible in large-part manufacturing with thermoplastics." He said the technology could be "a game-changer for manufacturers seeking improved performance, efficiency, and sustainability".

CLICK ON THE LINKS FOR MORE INFORMATION:

- **https://entek.com**
- **www.xindacorp.com**
- **https://busscorp.com**
- **www.farrel-pomini.com**
- **www.battenfeld-cincinnati.com**
- **https://bbeng.de**
- **https://onecpm.com**
- **www.erema.com**
- **www.randcastletechnology.com**
- **www.kraussmaffei.com**
- **www.sabic.com**

IMAGE: AMI

AMI's compounding expo returns to Cleveland, Ohio

This year's Compounding World Expo North America – held in November – highlights new technologies and includes a free two-day conference featuring leading industry figures

Visitors to this year's Plastics World Expos 2025 – held on 12–13 November in Cleveland, Ohio – will have access to more than 300 exhibitors.

The free exhibition and conference, which takes place at the Huntington Convention Center, is North America's largest plastics industry gathering of the year.

The event brings together four focused expos: Plastics Extrusion World Expo, Compounding World Expo, Plastics Recycling World Expo and Polymer Testing World Expo. Each includes a range of international suppliers, plus a dedicated conference theatre with full two-day programmes of technology talks, business debates and keynote presentations.

The exhibitor lineup boasts many leading industry players including: Advansix; Ampacet; Buss; BYK; Cabot; Cargil; Clariant; Conair; Coperion; CPM; Davis-Standard; Entek; Erema; Farrel Pomini; Galata; Gneuss; Heritage Plastics; IMCD; Imerys; KraussMaffei; KW Plastics; Leistritz; Maag; Milliken; Mitsui; Motan; Omya; PTi; Q-Lab; Revolution; Shini; Struktol; Thermo Fisher; TPEI; Westlake; Windmoeller & Hoelscher; and X-Rite.

"Attracting over 300 exhibitors is a testament to the strength of the plastics community and the value this show delivers," said Kelly DeFino, exhibition sales team manager at AMI. "With new features like our AI in Plastics theme, we're continuing to evolve and expand the show's relevance."

Exhibitor slots are still available. For more information on exhibiting, visit the **website**.

The expos will showcase a comprehensive selection of manufacturers of extrusion, compounding, recycling and testing equipment, alongside suppliers of polymers, additives, software and industry services.

The event will also host over 100 expert speakers in its four conference theatres. They will explore key themes including materials innovations, process optimisation, recycling technologies, market trends, regulatory developments and the increasingly vital role of AI.

- For more details on the exhibition, click **HERE**.
- For more details on the conference, click **HERE**.
- To secure a free two-day pass to the expos and conferences, register **HERE**.

Main image: This year's event hosts more than 300 exhibitors from across the plastics supply chain

IMAGE: AIMPLAS

Right: Researcher at work in Aimplas laboratory

Advanced Cryogenic Enterprises treats fine ground materials through ambient and cryogenic processes, while utilizing a variety of types and sizes of equipment.
› **www.acecryo.com**

AdvanSix is a manufacturer of PA 6 resin and PA 6/66 co-polymer used in a variety of applications, including automotive components, packaging, and sporting goods.
› **www.advansix.com**

Aimplas is a plastics technology centre that provides solutions to companies throughout the value chain, from raw material manufacturers to plastic processors and end users.
› **www.aimplas.net**

Akdeniz Chemson, a leading manufacturer of polymer additives, specialises in PVC stabilisers and offers tailor-made solutions to meet customer demands.
› **www.akdenizchemson.com**

Akron Rubber Development Lab (ARDL) is a global independent test laboratory specializing in rubber, plastic, and latex.
› **www.ardl.com**

ALAC International is a key player in chemical distribution and logistics, providing quality chemicals to industries such as plastics and automotive.
› **www.alacinternational.com**

American Cutting Edge is a leading supplier of machine knives and industrial razor blades, committed to making cutting effortless for their clients.
› **https://americancuttingedge.com**

Below: AZO Batchtainer transport and storage system

IMAGE: AZO

American Industrial Products specialises in filtration solutions, providing filtration elements, gaskets, seals, spare parts, and equipment to various industries.
› **www.ameinpro.com**

Amfine Chemical is a manufacturer of polymer additives utilising the global leading technology from Adeka Corporation.
› **www.amfine.com**

Ampacet showcases AI automation for colour correction in extrusion and moulding processes with LIAD Smart technology.
› **www.ampacet.com**

AssetWatch is a turnkey partner in predictive maintenance. It provides end-to-end condition monitoring solutions and combines vibration, temperature, and oil analysis in one platform for a holistic asset health view.
› **www.assetwatch.com**

AZO provides innovative bulk and raw material handling, pneumatic conveying systems, mixer feeding, screeners and bulk containers for the automation of production processes.
› **www.azo.com**

B&P Littleford designs and custom builds a wide spectrum of mixing, drying, extruding, compounding, reacting, and centrifugal separation equipment for large or small-scale manufacturing applications.
› **www.bplittleford.com**

Baerlocher USA is a leading manufacturer of additives for the plastics industry, delivering

tailored solutions in an ethical and supportive manner.
› **www.baerlocherusa.com/**

Barentz is a global distributor of life science ingredients and specialty chemicals, offering technical support and customised solutions.
› **www.barentz-na.com**

Bay Plastics Machinery offers a full range of strand pelletisers, conveyors, water baths, air knives/strand dewatering units, and spare parts.
› **https://bayplasticsmachinery.com**

Benvic Chemres is a subsidiary of European compound producer Benvic which was acquired in 2022.
› **www.benvic.com**

Birla Carbon is a global leader in carbon black, providing solutions for rubber and specialty applications.
› **www.birlacarbon.com**

Brenntag North America, part of the Brenntag distribution group, is located in Reading, PA, US.
› **www.brenntag.com**

Bronkhorst USA provides fluidics handling solutions, including meters and controllers for low flow applications.
› **www.bronkhorstusa.com**

BUSS is a leader in compounding and pelletising systems, with the versatile BUSS Kneader being widely used in various industries.
› **https://busscorp.com**

BUSS ChemTech is a developer and supplier of proprietary technologies to many sectors of the chemical industry including the chemical recycling of waste plastic. BUSS ChemTech became part of the Ballestra Group in 2021.
› **www.buss-ct.com**

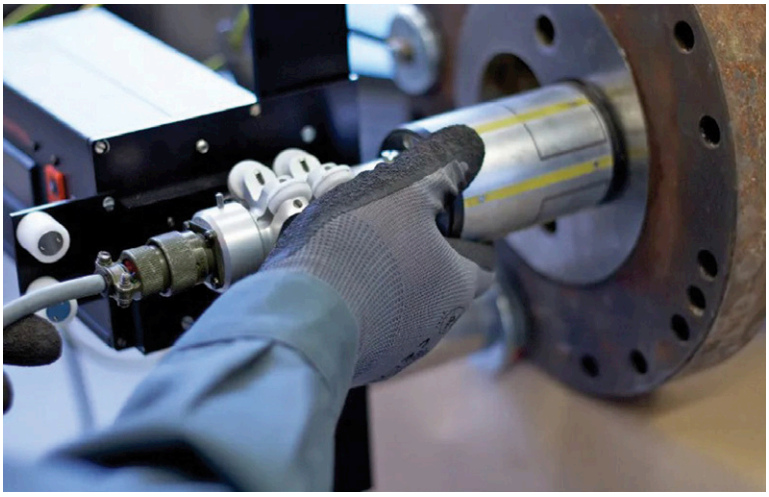


IMAGE: CA PICARD

Above: Barrel wear measurement is one of the services provided by CA Picard

BYK supplies specialty additives to enhance product quality and streamline production processes.
› **www.byk.com**

CA Picard produces parts for extruders, specialising in twin screw and single screw segmented machines.
› **www.capicard.com**

Cabot supplies specialty carbons, conductive carbons, masterbatches and conductive compounds that can deliver a range of performance attributes.
› **www.cabotcorp.com**

Calcean Minerals & Materials processes oolitic aragonite, a sustainable and renewable calcium carbonate product for a range of applications.
› **www.calcean.com**

Cargill's Polymer Additives business offers a wide range of high performance and bio-based spe-

cialty additives that enhance the performance of polymers.
› **www.cargill.com/polymer-additives**

Carolina Filters offers technical cleaning services and solutions for metallic filtration challenges.
› **www.carolinapec.com**

Chemyork is a global supplier of specialty chemicals and raw materials, offering products like plastic additives, TPE compounds, and engineering plastics compounds.
› **https://chemyork.com**

Chroma Color specialises in colour concentrates serving diverse markets, with custom solutions and technical expertise meeting industry standards.
› **https://chromacolors.com**

Cimbar Performance Minerals is a global supplier of mineral-based additives, with 16 production and mining sites worldwide.
› **https://cimbar.com**

Circular Polymers by Ascend, part of Ascend Performance Materials, makes recycled polymers and materials using its proprietary carpet reclaim technology.
› **www.circularpolymers.com**

Clariant operates an additives business which supplies products with functional effects in plastics, coatings, inks, adhesives, textiles, fibres, and more.
› **www.clariant.com**

CMC Custom Milling and Consulting is a specialist in wet milling and mixing solutions. In 2021, CMC joined ChromaScape, further enhancing its ability to provide innovative, customer-focused solutions across industries.
› **https://cmcmilling.com**

ColVisTec provides inline spectroscopy solutions for continuous operations and R&D, detecting and displaying process variations in real time, allowing for immediate intervention to prevent off-spec material production.
› **www.colvistec.de**

Conair Group is a leading supplier of plastics

auxiliary equipment, including resin drying systems, blenders, feeders, material-conveying systems, heat transfer equipment, granulators, downstream extrusion systems, and Industry 4.0 solutions.
› **www.conairgroup.com**

Coperion is a global leader in compounding and extrusion systems. Its product portfolio encompasses size reduction, washing, separating, drying, agglomeration, milling, mixing, thermal processing, dust collection, and pneumatic conveying systems.
› **www.coperion.com**

Corporacion Sierra Madre manufactures chemical specialties tailored to customer needs, offering competitive advantages in quality, functionality, performance, cost, and service attitude.
› **www.corpsierramadre.com**

Covia provides mineral-based solutions for a wide range of plastics applications, focusing on physical, chemical, and optical properties.
› **www.coviacorp.com**

CPM is a leader in equipment manufacturing, specialising in twin and multi-screw systems for various industries.
› **https://onecpm.com**

CT Polymers is a custom plastic compounding and recycling company.
› **https://ctpolymers.com**

Dorstener Wire Tech specialises in polymer filtration components and extruder screens to enhance throughput and reduce costs.
› **https://dwt-inc.com/**

Dositech is a global producer of powder and liquid dosing systems for automatic recipe creation.
› **https://dositechglobal.com**

Double Bond Chemicals focuses on fine chemicals for the polymer and UV-coating industries, prioritising safety and environmental care.
› **www.dbc.com.tw**

DoverMEI specializes in providing bulk solids handling systems.
› **https://dovermei.com**

ECON North America specialises in underwater pelletising technologies and screen changers, providing innovative solutions for global producers of resins, compounders, and recycling companies.
› **www.econ-us.com**

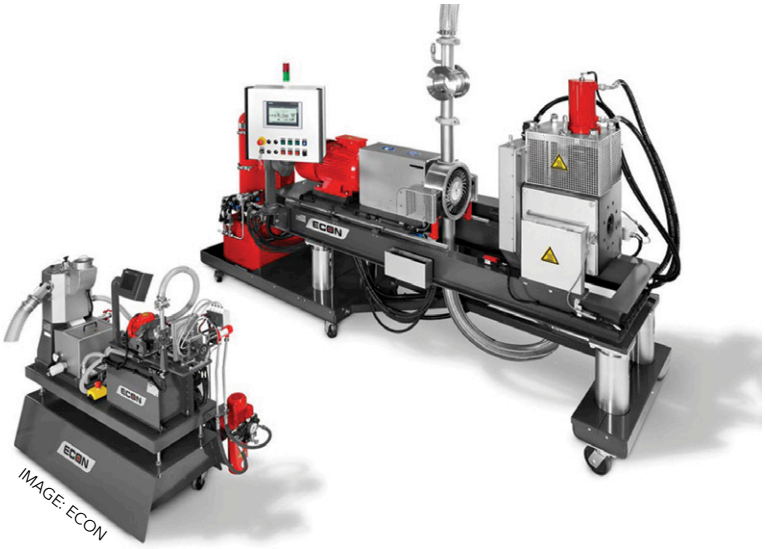


IMAGE: ECON

Above: EUP 10 and EUP 6000 underwater pelletisers from ECON

Ecopuro focuses on advanced materials technologies with innovations like Boundary Breaker for improving material flow in thermoplastics.
› **https://ecopuro.com**

Ensign Equipment offers bulk material handling equipment worldwide for a wide range of applications.
› **https://ensigneq.com**

Entec Polymers is a leading thermoplastic distributor offering a wide range of resins and compounds supported by experienced sales representatives and technical engineering.
› **www.entecpolymers.com**

ENTEK manufactures extrusion systems and components for various applications, providing turnkey solutions for custom compounding and compounding lines.
› **www.entek.com**

ENTEX specialises in planetary roller extruders for continuous mixing and processing in industries such as plastics, rubber, and chemicals.
› **www.entex.de**

Environ is a distributor of polymer additives and other products which has offices and warehouses in India, US and UAE and represents more than 45 chemical manufacturers.
› **www.environchem.us**

Evonik products include additives for the polymer market designed to modify and/or improve surface

properties of polymers while also improving sustainability.
› **www.evonik.com**

Extreme Coatings offers wear-resistant solutions for machinery components, such as encapsulated feedscrews, to extend their lifespan and maximise production efficiency.
› **https://extremecoatings.net**

Extrusion Consulting provides services ranging from material selection, product testing, extrusion equipment, extrusion processes, business plan development to legal services.
› **www.extrusionconsultinginc.com**

Exxel Polymers says plastic scraps in the form of parts, granules or beads are recovered and analysed in order to meet its customers' moulding specifications.
› **https://exxelpolymers.com**

Farrel Pomini manufactures compounding systems, including the Farrel Continuous Mixer which is designed for distributive and dispersive mixing with low processing temperatures, enhancing efficiency.
› **www.farrel-pomini.com**

Federal Equipment's machinery spans plastic materials production to end-product manufacturing, including mixing, compounding, recycling, moulding and extrusion processing.
› **www.fedequip.com**

Finite Fiber's product line includes cellulose, cotton, nylon, polyester, carbon, and aramid fibres and fibre blends.
› **www.finitefiber.com**

Galata Chemicals produces PVC additives for a range of industries globally.
› **www.galatachemicals.com**

Gehring Montgomery distributes high-quality chemicals for the compounding industry, including flame retardants and waxes.
› **www.gehring-montgomery.com**

General Polymers Thermoplastic Materials focuses on providing solutions for compounded and engineering resins.
› **www.gp-materials.com**

Genryo International is a global distributor in the plastics and polymers engineering sector, with over nine years of experience in the market.
› **http://genryointl.com**

IMAGE: GÖTTFERT

Right: Göttfert technology for measuring intrinsic viscosity

Global-Pak specialises in bulk packaging solutions with a focus on customer service.
› **www.global-pak.com**

Göttfert offers a range of rheological testing technology for various applications in the polymer industry.
› **www.goettfert.com**

Hangzhou JLS Flame Retardants offers HFFR solutions for PP, GFPP, PE, PA, GFPA, PVC, ABS, nylon spinning and specific customized products.
› **https://en.jlschemical.com**

Harwick Standard is a supplier of raw materials and additives for plastics, rubber, coatings, and adhesives.
› **www.harwick.com**

Helluva Container specialises in high-quality used and new Gaylord boxes, FIBC bulk bags, liners, films, tapes, and pallets.
› **www.helluva.com**

Heritage Plastics develops calcium carbonate concentrates to improve the performance and productivity of plastic resins, offering solutions to offset rising resin costs.
› **www.heritage-plastics.com**

Holland Colours Americas is a producer of custom colourants and additives for plastics,

coatings, and fabrics with a focus on sustainability.
› **www.hollandcolours.com**

Horizon Systems provides customised material handling and process solutions for the plastics industry, focusing on quality control, safety, and efficiency.
› **www.horizonsystemsinc.com**

ID Additives offers a range of chemical foaming agents, purging compounds, plastic mould cleaners, preventative maintenance cleaning systems, and other additives for the plastics industry.
› **www.idadditives.com**

IMCD operates across the USA, providing specialty chemicals and ingredients from global producers to develop innovative solutions.
› **www.imcdus.com**

Imerys has a wide portfolio of engineered talcs, kaolins, calcium carbonates, graphites, diatomites, carbon blacks, micas and wollastonites for the plastics industry.
› **www.imerys.com**

IMI Fabi is a leading talc manufacturer serving the plastics industry among others.
› **www.imifabi.com**

Imperial Industries fabricates industrial bulk storage tanks for various applications.
› **www.imperialind.com**

IMS Group USA is a provider of packaging equipment, machinery, and automation systems for various industries.
› **www.imsgroupusa.net**

Incoa Performance Minerals is a supplier of high purity grades of ground calcium carbonate.
› **www.incoa.com**

Insight Polymers & Compounding specialises in providing solutions for custom and specialty polymer compounds, offering concentrate masterbatches and fully formulated systems.
› **https://insightpolymers.com**

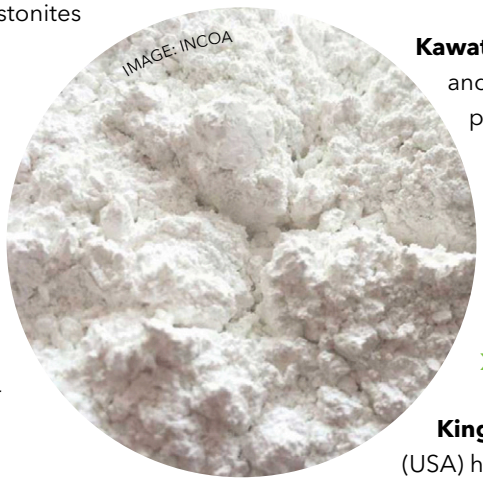
J Rettenmaier USA has more than 90 production and sales locations worldwide, providing plant fibre technology solutions for various industries.
› **www.jrsusa.com**

Japan Steel Works (JSW) America manufactures a wide range of process equipment, namely, extruder/pelletising systems, twin screw compounding extruders, film sheet machines and spinning extruders.
› **www.jswamerica.com**

J-Tec Material Handling provides automated material handling systems and process engineering solutions for the food and chemical industries.
› **https://j-tec.com**

Kal-Polymers is a compounder of recycled plastic raw materials, specialising in PP, PE, PET, and PS, among others.
› **www.kalpolymers.com**

Kaneka North America provides innovative additive solutions for the plastics industry.
› **www.kaneka.com**



Left: Incoa Performance Minerals supplies high purity grades of ground calcium carbonate

Kawata USA is a supplier of ancillary equipment for plastics processing.
› **www.kawata-usa.com**

KibbeChem is a supplier of chemical foaming agents and colour concentrates to the plastics industry.
› **www.kibbechem.com**

Kingfa Science and Technology (USA) has a product portfolio which includes modified plastics, recycled plastics, biodegradable plastics, specialty engineering plastics, and carbon fibre composites.
› **www.kingfa.com**

Kisuma Americas supplies magnesium-based technology for polymer and pharmaceutical/nutraceutical additives.
› **https://kisuma.com/**

KraussMaffei is a leading manufacturer of machines and systems for plastic and rubber production, with a wide range of technologies in injection moulding and extrusion.
› **www.kraussmaffei.com/en/home**

Kubota Brabender Technologie manufactures feeding solutions for various industries, offering a

IMAGE: LAWER

Above: Lawer's automatic weighing systems for masterbatch production include the Supersincro system

range of feed mechanisms and agitation systems.
› **www.kubota-btca.com**

Lawer specialises in industrial weighing systems, providing technologies for the automatic weighing of powder and liquid products.
› **www.lawer.com**

Leistritz Extrusion manufactures twin screw extruders for various applications, including compounding and film and sheet systems.
› **http://extruders.leistritz.com**

Lignetics Group has developed NaturFil, a patent-pending wood flour concentrate for compounding and moulding applications which is made from responsibly sourced biomass which is pelletized for superior feedability, safer handling, and minimal dust.
› **https://lignetics.com**

LIST Technology is a leading provider of mixing, kneading and drying equipment specially designed for high viscosity materials.
› **www.list-technology.ch**

Lumina Materials has mining in Greenland from where it exports its primary mineral, Anorthosite, to clients across three continents, focusing on infrastructure development in North America and Europe.
› **www.luminamaterials.com**

MAAG Americas provides customisable systems and integrated solutions in process technology for the polymer and chemical industries.
› **https://maag.com/**

Magris Talc is a leading talc producer, supplying quality products for industrial applications globally.
› **www.magrispm.com**

Matium is a company that specialises in extruder screen filtration products.
› **www.matium.io**

Meridian Manufacturing focuses on toll grinding plastic polymers and ingredients for the polymer industry using various equipment.
› **www.meridianmfg.com**

Mettle Filtration Products supplies all types of extruder screens, hard-to-find mesh, and extra heavy wire cloth.
› **www.mettlefiltration.com**

Midwest Elastomers is a toll manufacturing company in plastic polymers, adhesives and ingredients to the polymer industry.
› **www.midwestelastomers.com**

Milliken has an additive portfolio which enables the use of virgin and recycled polypropylene and polyethylene in new products.
› **www.milliken.com**

Mine Plastik is a masterbatch and plastic additive manufacturer based in Turkey.
› **https://minecolours.com.tr/en**

Mitsui Chemicals America produces specialty chemicals and high-performance polymers for North and South American markets.
› **https://us.mitsuichemicals.com/**

Mixaco USA is a leading supplier of mixing systems for the PVC Industry.
› **www.mixaco.com**

Mixron offers advanced mixing systems for polymers and various other industries.
› **www.mixron.it**

MLC's products include high-calcium lime, dolomitic lime, lime-based chemical specialties, and technical solutions.
› **www.mlc.com**

Modern Dispersions produces a wide variety of colour, specialty, and additive products for different applications. The company's latest developments include conductive and graphite masterbatches.
› **www.moderndispersions.com**

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IMAGE: NICHE POLYMER

Left: Niche Polymer is a custom compounder and toll processor for engineering resins

Motan product lines for material management include dosing and mixing, drying, conveying and storage as well as the corresponding control and automation technology.
› **www.motan.com**

Nagase America is part of the Japan-headquartered Nagase trading firm involved in materials and chemicals.
› **www.nagase.com**

NanoXplore is a graphene company that manufactures industrial volume graphene using proprietary technology.
› **https://nanoxplore.ca**

National Bulk Equipment (NBE) specialises in designing and engineering equipment for bulk material handling applications, such as conveying, mixing, and storage.
› **www.nbe-inc.com**

Niche Polymer is a custom compounder and toll processor for engineering resins. Its compounds include nylon, polypropylene, polycarbonate, polystyrene, ABS and PCABS.
› **www.nichepolymer.com**

NOF America is a producer of plastic additives to improve wear resistance and anti-scratch properties, reduce friction, prevent squeak noise, among other benefits.
› **www.nofamerica.com**

Norac Additives has been in the metallic stearate business for over 50 years, offering PVC additives like heat stabilisers and lubricants.
› **www.noracadditives.com**

O.A. Newton specialises in material handling solutions for industries worldwide, providing innovative conveying methods and compounding systems.
› **www.oanewton.com**

Orbetron offers extrusion and precision bulk feeding solutions.
› **https://orbetron.com/**

Palmer Holland is a North American specialty chemical distributor focusing on specialty plastic additives and resins for various industries.
› **www.palmerholland.com**

Performance Additives has a product portfolio which includes CPE, process aids and impact modifiers.
› **www.performanceadditives.us**

PGI Plastics is a thermoplastic resins distributor in the USA, Canada and Mexico, and also trades materials worldwide.
› **https://pgiplastics.com**

PINFA North America is a not for profit trade organisation of non halogenated flame retardant additive manufacturers, synergist suppliers, compounders, formulators and related organisations.
› **www.pinfa-na.org**

PLAS MEC specialises in manufacturing equipment and accessories for mixing plastic materials, technical polymers, powder coatings resins, wood-plastic composites, and more.
› **www.plasmec.it**

Plastic Systems USA produces advanced plastic solutions for various industries such as automotive, pharmaceutical, PET, and construction.
› **www.plasticsystems.it**

Plastical is a calcium carbonate masterbatch producer located in Alabama, catering to industries like film, sheet, thermoforming, injection moulding, and more.
› **https://plasti-cal.com/**

Plastics Machinery Group buys and sells various plastics equipment, including thermoforming, blow moulding, injection moulding, and more.
› **www.plasticsmg.com/**

PMC Group is a global chemicals company with business units that specialise in flame-retardant

compounds, specialty chemicals produced from renewable resources, and organometallic catalysts and stabilisers.
› **https://pmc-group.com**

Poly Compounding specializes in toll compounding heat and shear sensitive engineered plastics.
› **https://polycompounding.com**

Polychem Dispersions is located in the major industrial hub of Middlefield, OH, where it has grown to become a leader in custom rubber and plastics dispersion compounding.
› **www.dispersions.com**

Polykemi's compounds are based on high quality virgin and recycled raw materials, customized with relevant reinforcing agents and additives.
› **www.polykemi.se**

Polymer Additives Group is a leading manufacturer and supplier of flame retardants and smoke suppressants, offering an extensive line of non-halogen flame retardants. **Reedy Chemical Foam** is a provider of chemical foaming agents.
› **www.pagholdings.com**
› **www.reedychemicalfoam.com**

Polystar Containment specialises in manufacturing and installing custom spill prevention systems that meet SPCC requirements.
› **www.polystarcontainment.com**

Polyvel produces plastic additive masterbatches and custom compounds for various industries such as film, fibre and moulding.
› **www.polyvel.com**

Prime Materials supplies industrial materials such as calcium stearate, zinc oxide, polyethylene waxes, titanium dioxide, plasticizers, antioxidants, and flame retardants.
› **www.primematerials.com**

Prism Worldwide transforms tyre rubber into performance-oriented circular polymers used in TPEs, thermoplastics, vulcanisates, and asphalt.
› **https://prismww.com/**

PromaXX Extrusion provides high-quality spare

parts and services for twin-screw extruders, including wear-resistant components and maintenance equipment.
› **www.promaxx.com.cn**

Qlar (formerly Schenck Process) is a global provider of solutions for industrial weighing, feeding, conveying, milling and grinding, and related digital applications of the CONiQ product family.
› **www.qlar.com**

Rapistak is a US manufacturer of stacker crane storage systems for mould and die storage. Prostak and Maxrak maximize storage space and improve storage density.
› **https://rapistak.com**

Reedy Chemical Foam manufactures Safoam chemical foaming agents used in thermoplastic processes to reduce weight and lower machine energy.
› **https://reedychemicalfoam.com**

Reliance Mixers manufactures mixing and compounding equipment for materials like PVC, providing customised solutions for homogenous mixing processes.
› **www.reliancemixers.com**

ReNew Plastics is a family-operated business in Northeastern Ohio that recycles PET.
› **www.renewplasticsrecycling.com**

Rianlon Americas is a supplier of antioxidants and light stabilisers for polymers, coatings, and lubricants.
› **www.rianlon.com**

Routsis Training offers hands-on and online training programs for the plastics industry, including custom courses in moulding, extrusion, and other processes.
› **www.traininteractive.com/ara**

Royce Global is a New Jersey-based supplier of dyes and specialty chemicals, which offers solvent dyes, colour masterbatches, and various performance additives like nucleating agents for polystyrene foam.
› **www.royceglobal.com**

SACO AEI Polymers is a distributor of specialty additives from Fine-Blend, Javachem and Suli.
› **www.sacoaei.com**

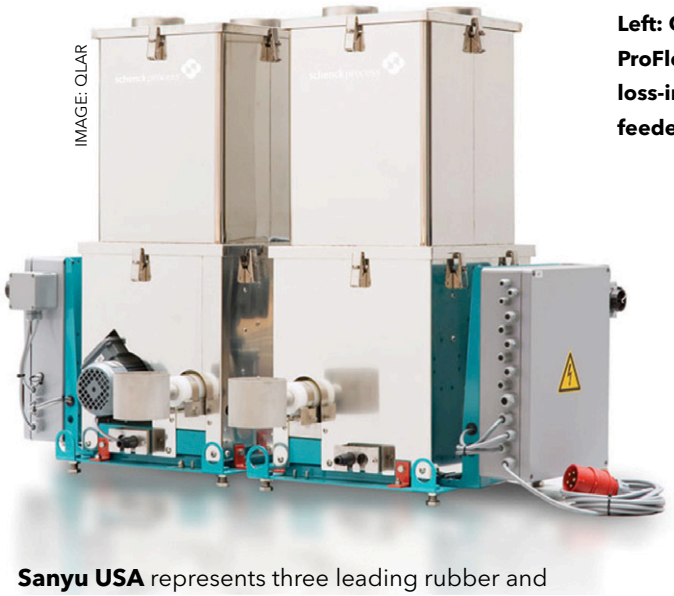
IMAGE: QLAR

Left: Qlar ProFlex C loss-in-weight feeder

Sanyu USA represents three leading rubber and silicone processing machinery manufacturers: Sanyu, Rubicon and Moriyama.
› **www.sanyu-sti.com**

Sasol Chemicals (USA) provides polymer processing additives, plasticisers, waxes, and alcohols used in plastics and rubber manufacturing.
› **www.sasol.com**

Schwing Technologies is a leader in thermal cleaning technologies, specialising in removing polymers and organic contaminants from metal tools and machine parts.
› **www.schwing.tech**

Sciences Computers Consultants provides simulation software for industrial processes like extrusion and mixing, optimising production efficiency and reducing waste.
› **www.scconsultants.com**

Shamrock Technologies is a leader in micronised wax and PTFE products, supplying specialty powders and additives used in coatings, inks, thermoplastics, and elastomers.
› **www.shamrocktechnologies.com**

Sikora offers advanced measuring, control, and testing technology for industries like wire, cable, hose, tube, and plastics, ensuring quality control and process optimisation.
› **www.sikora.net**

SILON specialises in polyolefin-based performance compounds, including crosslinked polyethylene and cable compounds for construction, automotive, and industrial applications.
› **www.silonllc.com**

IMAGE: STEER

Above: Steer America makes the Omega series twin-screw extruders

Silver Fern Chemical is a supplier of specialty chemicals, including metallic stearates and high-performance additives for enhancing extrusion, dispersion, and sustainability in polyolefins, PVC, and masterbatches.
› **www.silverfernchemical.com**

Soucy Techno is a producer of black masterbatch, which it says is known for its product quality consistency at competitive prices.
› **www.soucy-group.com**

SPG Construction is a process and heavy industrial construction company focusing on capital projects.
› **www.spg.net**

Spira/flo Pipe is a system for pneumatic conveying of plastics and other products.
› **www.spiraflopipe.com**

Springfield Industries is an adhesive and adhesive ingredient developer and manufacturer, specializing in reactions (often high viscosity liquid or solid), masterbatches and compounding.
› **www.springfieldind.com**

Stadler America is a specialist in the design, production and assembly of automated sorting systems and machines for the recycling industry.
› **https://w-stadler.com**

Star Plastics supplies high-quality thermoplastic materials and custom formulations, specialising in PC, ABS, nylon, and UL-validated recycled content.
› **www.starplastics.com**

Steer America is a leading manufacturer of twin screw extruders, providing advanced process control for temperature- and shear-sensitive applications in plastics.
› **www.steeramerica.com**

Struktol Company of America specialises in additives for polymers, including PE, PP, PVC, and nylon.
› **www.struktol.com**

Syncro Group provides advanced auxiliary equipment and machinery for industries, focusing on minimising energy consumption and waste.
› **https://syncro-group.com**

Technical Process & Engineering Inc (TPEI) is a supplier of mixers and compounding lines for plastics and rubber, offering maintenance, rebuilding, and custom compounding solutions.
› **www.tpei.com**

Techno-UMG America is the North American business of Japan-headquartered ABS group Techno-UMG.
› **www.t-umg.com**

The Bonnot Company has been designing and building durable, robust extruders and extrusion equipment since 1891.
› **www.thebonnotco.com**

The Chemical Company is a global supplier of composites, esters, and additives for the compounding industry, known for its plasticiser and flame retardant portfolios.
› **www.thechemco.com**

The Polymers Center provides technical support and services to the plastics industry, offering masterbatch production, custom compounding, and training in extrusion and injection moulding.
› **https://polymers-center.org**

Thermo Fisher Scientific is a leader in scientific solutions, offering innovative products for polymer analysis and development, including twin-screw extruders, rheometers, and spectrometers.
› **www.thermofisher.com**

Tinius Olsen is a leading manufacturer and supplier of static tension and/or compression materials testing machines.
› **www.tiniusolsen.com**

Tosaf produces a wide range of additives for polymer materials, as well as black and white masterbatch and other products.
› **www.tosaf.com**

Toyota Tsusho America is a diversified enterprise

promoting specialty additive materials for thermoplastics.
› **www.toyota-tsusho.com**

Trendelkamp designs and manufactures extrusion system solutions, including melt filtration systems, diverter valves, and polymer processing equipment.
› **www.trendelkamp.com**

Unibrom is a leading manufacturer of flame retardants for plastics, textiles, coatings, and rubber, offering innovative solutions for engineering materials.
› **www.unibrom.com**

US Silica is a global industrial minerals producer, providing over 1,500 products, including Ever-White Pigment, which helps reduce dependency on titanium dioxide.
› **www.ussilica.com**

Vartega recycles carbon fibre at scale, sourcing raw materials from various dry fibre and prepreg scrap sources.
› **www.vartega.com**

Vortex specialises in the design of components for the transport and flow control of dry bulk solids.
› **www.vortexglobal.com**

Wacker Chemical is a global chemical company offering a wide range of solutions for the chemical and plastics industry.
› **www.wacker.com**

Welset Americas manufactures plastic compounds and single pigment dispersions, offering over 4,000 colour concentrates for the plastics compounding and masterbatch industries.
› **https://welset.com**

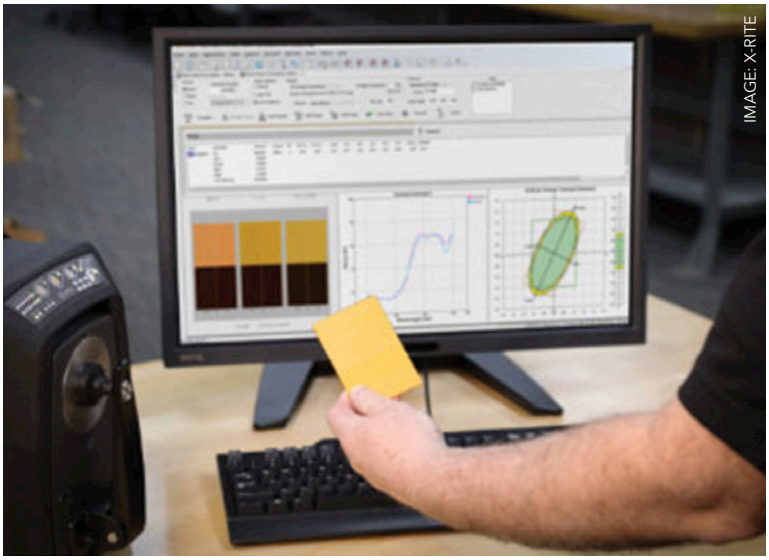
IMAGE: X-RITE

Above: X-Rite makes colour measurement technology for masterbatch and other applications

Westlake is a Fortune 500 company providing PE and PVC resins, additives, and compounds for the plastics industry.
› **www.westlake.com**

Witte Company designs and manufactures drying, cooling and classifying equipment including specific models tailored for compounders.
› **www.witte.com**

X-Rite provides colour measurement solutions for various industries to ensure colour accuracy and consistency.
› **www.xrite.com**

Zeppelin Systems USA is a leader in bulk materials handling systems, offering turnkey solutions and patented processes for plastics producers.
› **www.zeppelin-systems.com**

Zoltek is a leader in carbon fibre production, offering affordable, high-performance materials for industries such as automotive.
› **https://zoltek.com**

Download these new product brochures

FEDDEM: COMPOUNDING TECHNOLOGY

In this company profile brochure, Feddem presents its compounding technology portfolio, including FED-MT co-rotating twin-screw extruders, plus FSB feeder, FSV side vacuum, and FSE side venting units.

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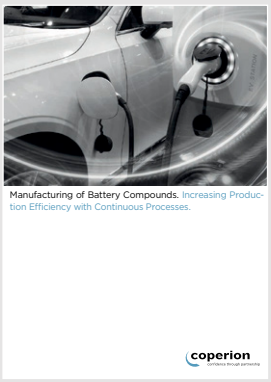
COPERION: BATTERY COMPOUNDS



In this brochure, Coperion and Coperion K-Tron provide details of their technologies for manufacturing high quality battery compounds.

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TA INSTRUMENTS: ANALYTICAL SOLUTIONS

An extensive range of polymer analysis solutions from TA Instruments enable R&D and processing staff to characterise materials at resin, compounding and converting operations, as shown in this 32-page brochure detailing technologies, applications and case studies.

› CLICK HERE TO DOWNLOAD

CABOT: SPECIALTY CARBON BLACK

This brochure from Cabot details the company's range of Vulcan specialty carbon blacks for formulation of low moisture absorption electrically conductive plastics for applications such as ESD packaging.

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KLK OLEO: GREEN ADDITIVES

KLK OLEO provides a series of products for industrial application. PALMOWAX and PALMESTER provide a green lubricant solution to polymer processing. TEMEST, PALMERE and PALMERA as green ingredients for PVC additives/plasticiser.

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SUKANO: BIO-MASTERBATCHES

Switzerland's Sukano offers a full range of bioplastic masterbatches and compounds to allow processors to maximise the performance of bio-based resins such as PLA and PHA and to simplify and speed up processing.

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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

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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.

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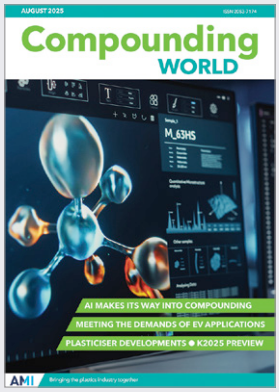

Compounding World August 2025
A new trend for AI to be used in compounding is the subject of the cover feature in the August issue of Compounding World magazine. Plus features on new materials in automotive applications and developments in plasticisers.

› CLICK HERE TO VIEW

Injection World October 2025
With the plastics industry's biggest event, K2025, taking place in Dusseldorf, the October issue of Injection World highlights developments to be seen at the show related to medical moulding, E&E materials, energy management and more.

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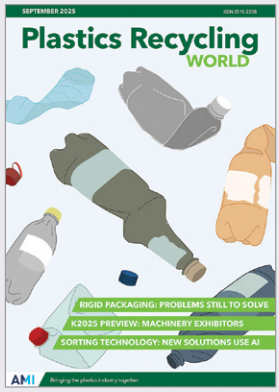

Plastics Recycling World September 2025
The cover feature of Plastics Recycling World's September edition takes a deep dive into recycling of rigid polyolefin packaging; plus there is a preview of recycling technology exhibitors at K2025 and the latest in sorting and granulation.

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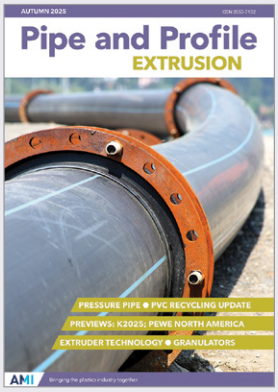

Pipe and Profile Autumn 2025
Pipe and Profile Extrusion's Autumn edition has a cover feature that looks at what's new in high pressure pipe, and features on PVC recycling, new granulators and extruder technologies, plus previews of K2025 and the US Plastics Extrusion World Expo.

› 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.

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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	Compounding World Expo N America, Cleveland	https://na.compoundingworldexpo.com
	4-7 November	Ecomondo, Rimini, Italy	www.ecomondo.com
	3-6 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.plasttekniknordic.com
	29-30 April	Textiles Recycling Expo, Charlotte, NC, USA	www.textilesrecyclingexpo.com

AMI CONFERENCES

11 November 2025	Performance Polyamides, Cleveland, OH, USA
11 November 2025	PFAS North America, Cleveland, OH, USA
11 November 2025	Polymers in Flooring, Cleveland, OH, USA
18-19 November 2025	Cables Asia, Bangkok, Thailand
1-3 December 2025	Fire Resistance in Plastics, Düsseldorf, Germany
2-3 December 2025	Polyolefin Additives, Cologne, Germany

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

www.amiplastics.com