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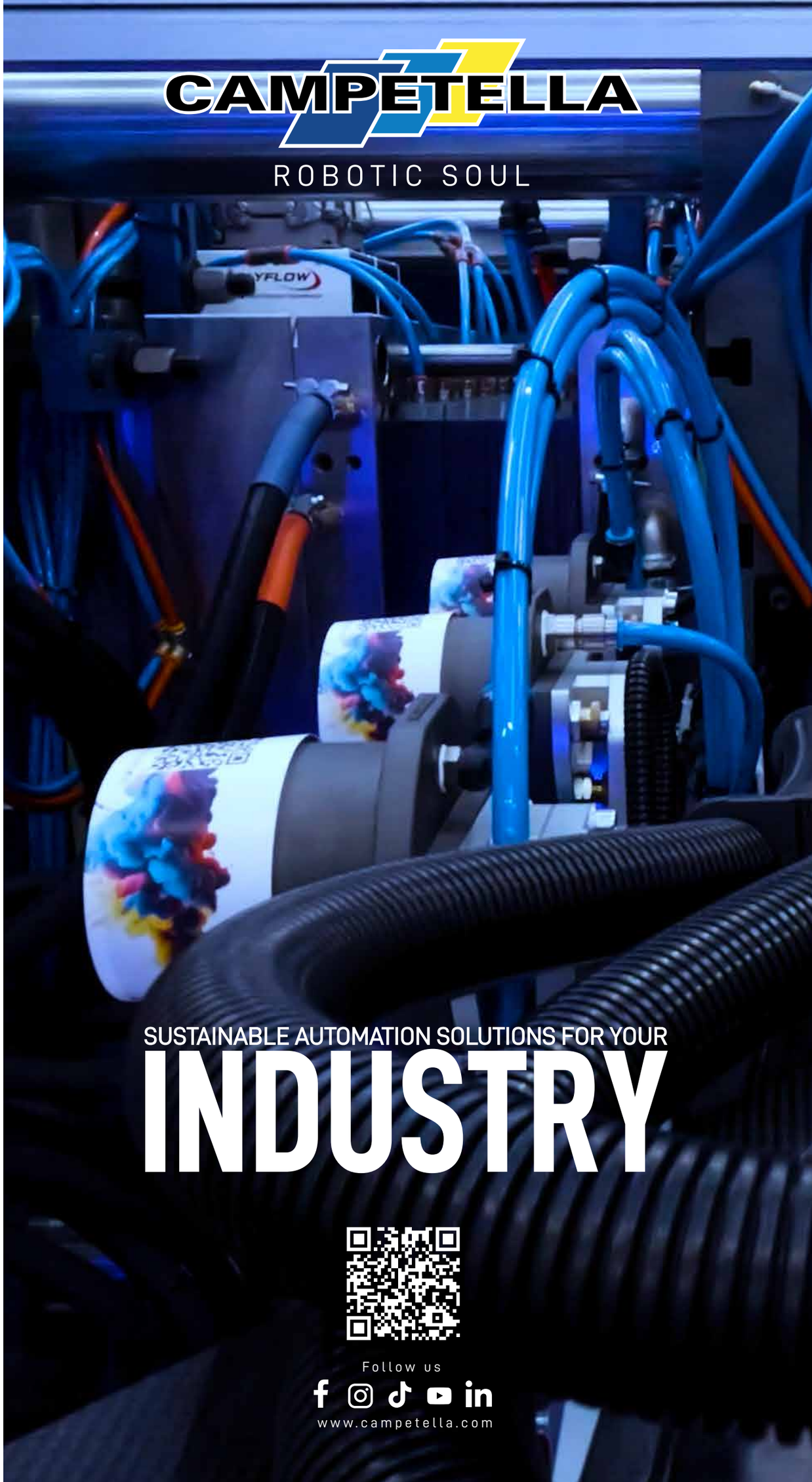
TECNO PLAST

The Monthly Magazine for the Plastics Industry

INTERNATIONAL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30th ANNIVERSARY EDITION

TECNO PLAST INTERNATIONAL

The Monthly Magazine for the Plastics Industry

N.1

January/February 2026
8,50 Euro

tecnoEdizioni Group

MACHINE OF THE MONTH

TECHNOPOLYMER MEDICAL TUBING MICRO-EXTRUSION BY TECNO SYSTEM

Medical micro-extrusion is a specialised manufacturing discipline in which dimensional accuracy, material behaviour and process repeatability are strictly interconnected.

The production of medical tubing for diagnostic, therapeutic and minimally invasive applications requires extrusion lines capable of maintaining stable geometries at very small diameters, while ensuring reliable processing of a wide range of medical-grade and engineering technopolymers.
Within this context, Tecno System develops dedicated medical micro-extrusion lines designed for the production of mono-lumen, multi-lumen and functionally differentiated tubing, with particular focus on three-layer and multi-layer configurations. These extrusion systems are engineered to support applications where different material properties and functional requirements must be combined within a single tube.

INTERVIEW

Maris extruders to produce adhesives

In today's rapidly evolving adhesives industry, process innovation and product quality have become inseparable

MEDICAL SECTOR

Integrated Automation by Toyo Europe and Campetella

An automation solution aimed at addressing the specific requirements of the medical and pharmaceutical sectors

PREVIEW

Jec World 2026

The trade exhibition for composite materials and their applications, JEC World returns on March 10-12, 2026, at Paris Nord Villepinte

THIRTY YEARS OF TECNOPLAST

Riding the wave of growing success, Tecnoplast magazine celebrates its thirtieth anniversary today.
Thirty years ago, the Internet was just beginning its journey toward mass adoption: Hotmail was launched, turning email into an everyday tool accessible to everyone. In communication and publishing, there was a strong spirit of innovation in the air. Change was not only visible — it was tangible.
Soon after, the first online magazines and websites would appear, along with everything that today we consider normal, almost taken for granted.
The ability of a good communicator has always been the capacity to adapt, to speak different languages without losing one's identity. To convey the same message across multiple channels without distorting it. Because, ultimately, content remains central, regardless of the medium through which it is delivered.
This is exactly the path that Tecnoplast has followed. A constant evolution, never passively endured but consciously guided: changing formats, evolving publications, the transition to digital, to the web, to video. Tecnoplast has transformed itself while always remaining true to its identity.
Today we are witnessing another Copernican shift. Artificial intelligence is taking off and is already redefining the way we produce content, analyze data, tell the story of industry, and interpret reality. It is a profound transformation, one that we are observing, studying, and experimenting with the same approach that has guided us over the past thirty years: curiosity, rigor, and critical thinking.
A message that is contemporary and forward-looking, capable of combining technical expertise and vision, information and dissemination, editorial tradition and innovation.
And so it is natural to ask: where will we be in another thirty years? What tools will we use, what languages will we speak, what platforms will we inhabit?
Perhaps someone will still read us on paper; perhaps on devices we cannot yet imagine (try explaining a tablet to a reader in 1996); perhaps — why not — even from Mars, as humanity continues to push a little further.
Whatever the medium, one thing will remain unchanged: the quality of ideas and the ability to tell the story of change.
One thing is certain: it will always remain a magazine...
Tooooop!

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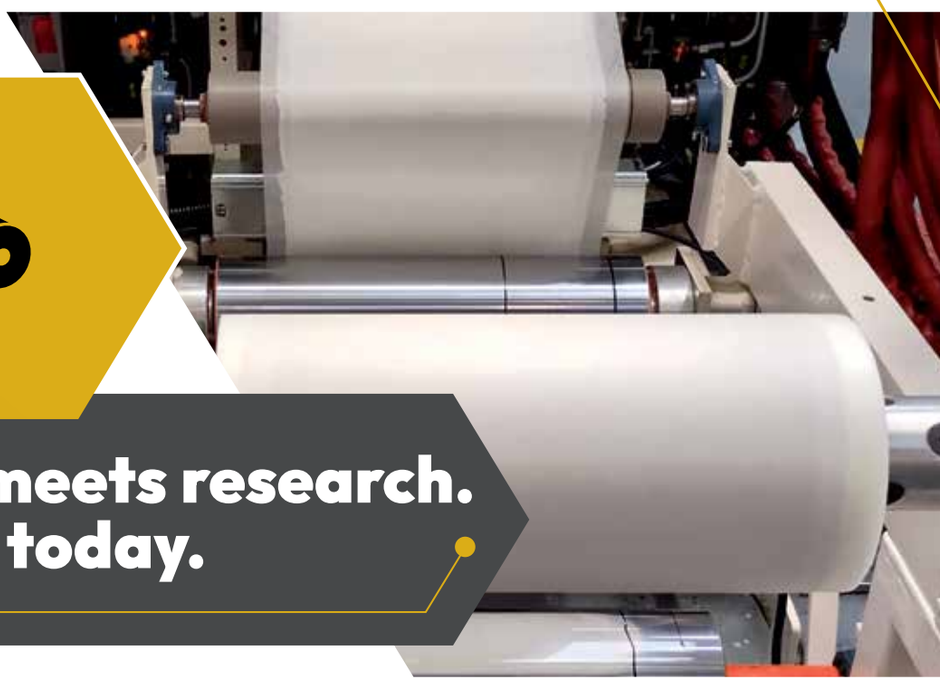
February 2026

RODOLFO COMERIO

WORLD LEADING MACHINES FOR PLASTICS AND RUBBER 1878



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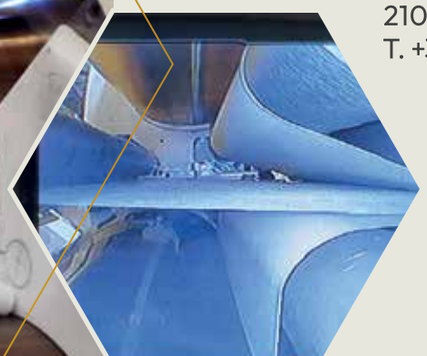

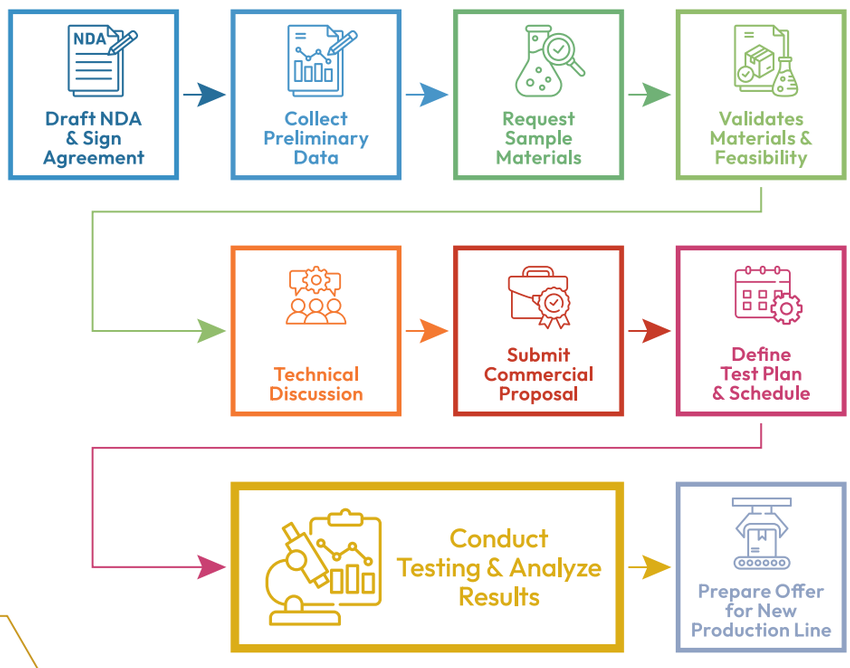

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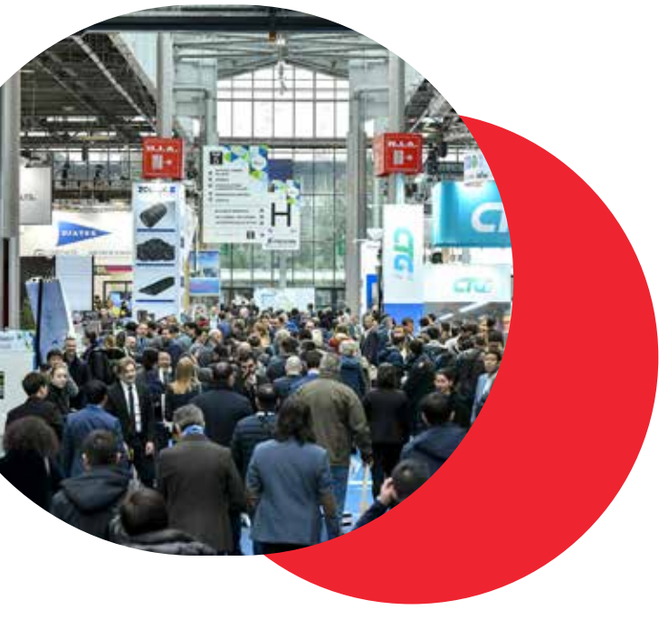

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EUROPEAN BIOPLASTICS CONFERENCE 2025 CELEBRATES 20 YEARS

EBC25 highlights growth, innovation, and Europe's new Bioeconomy Strategy.

European Bioplastics concluded the 20th edition of its annual conference, bringing together over 320 participants in Berlin and online for two days of presentations, panels, and networking. EBC25 coincided with the launch of Europe's new Bioeconomy Strategy, providing a platform to discuss policy, innovation, and research shaping the future of sustainable materials.

Co-Chairs Mariagiovanna Vetere and Franz Kraus welcomed the strategy, emphasizing collaboration as key to advancing the industry globally. Lorenza Romanese, Secretary General of European Bioplastics, underlined the importance of alignment across the sector to turn potential into tangible results.

The programme included 48 speakers and a market data session confirming steady growth in global biobased plastics production, projected to double from 2.31 million tonnes in 2025 to 4.69 million tonnes by 2030. Panels covered EU policy, mass balance, biodegradability, biobased solutions, compostables, and technical innovations, while 47 companies showcased new products and applications.

"This year's data show that bioplastics are growing not only in capacity but in strategic relevance," said Hasso von Pogrell, Managing Director of European Bioplastics. "With the new Bioeconomy Strategy, Europe recognizes the role of biobased materials in reducing fossil dependency and driving sustainable industrial transformation."

Looking back, a special panel celebrated the conference's evolution from its first edition in Brussels to today, reflecting on its pivotal role in shaping industry dialogue. EBC26 will take place on 1-2 December 2026.

european-bioplastics.org

GENERATION CHANGE AT WITTMANN BENELUX

Mark Verveer appointed as new Managing Director as Michel van der Motten retires after 31 years.

WITTMANN BATTENFELD Benelux N.V., based in Holsbeek, Belgium, is implementing a generation change at the end of 2025. After 31 years as Managing Director, Michel van der Motten will retire, and Mark Verveer will take over the leadership.

"Michel van der Motten has firmly established the WITTMANN and WITTMANN BATTENFELD brands in the Benelux region and secured a leading market position," said Michael Wittmann, Owner and Managing Director of the WITTMANN Group. "We sincerely thank him for his outstanding contribution and wish him all the best in the next stage of his life."

To ensure continuity, Mark Verveer joined the company on October 1, 2025. A mechanical engineer with over 30 years of experience in the injection molding and plastics machinery industry, Verveer brings in-depth knowledge of the Benelux market and international industry networks.

The sales team has also been strengthened with the addition of Eric Claeyssens as sales engineer since August 1, 2025. Claeyssens, a graduate electrical engineer, brings more than 20 years of experience in technical support and plastics machinery sales.

The WITTMANN Group, headquartered in Vienna, Austria, is a global leader in injection molding machines, robots, and auxiliary equipment, promoting energy-efficient processes and circular economy practices. Its modular product range allows seamless integration into Smart Factories, combining machines, automation, and auxiliary systems to meet growing industry demands.

wittmann-group.com

XENIA LAUNCHES: THERMOPLASTIC COMPOSITES FOR THE CHEMICAL INDUSTRY

High-performance, conductive materials for demanding industrial and chemical environments.

Xenia, a global leader in high-performance thermoplastic composites for injection molding and additive manufacturing, presents its new range of materials designed for the chemical industry. Engineered to withstand aggressive chemicals, high temperatures, and potentially explosive environments (ATEX-certified and static-dissipative), these composites offer exceptional chemical resistance, thermal stability, and electrical conductivity up to 10^{2} ohm·m.

The range includes conductive compounds based on HDPE, PP, and PVDF. HDPE composites reinforced with carbon fiber combine mechanical strength and controlled conductivity, ideal for piping systems and protective components. PP compounds offer enhanced rigidity, mechanical performance, and conductivity, suitable for tanks, containers, and industrial infrastructure. PVDF-based materials provide permanent antistatic performance, ATEX compliance, V0 fire resistance, and UV durability, making them ideal for pumps, valves, sensors, cables, and battery components.

These materials ensure structural integrity, dimensional stability, and reliable conductivity under mechanical and thermal stress, offering a lightweight and efficient alternative to metals in ATEX-classified chemical processes.

"With this range, Xenia delivers integrated, high-performance solutions for the chemical industry, combining durability, safety, and operational efficiency in the most demanding environments," says the company.

xeniamaterials.com/industria-chimica

MERAXIS EXPANDS PORTFOLIO WITH LABORATORY SERVICES

Comprehensive testing capabilities for polymers strengthen support for industry and recyclates.

Muri b. Bern/Switzerland, 11 December 2025 – Meraxis is expanding its service portfolio by offering comprehensive laboratory services for the polymer industry starting January 2026. The company is taking over the accredited testing laboratories from the REHAU Group, adding independent and internationally comparable testing to its offerings.

The Rehau site laboratory network includes over 500 test procedures, 64 of which are accredited, covering chemical analysis, physical-mechanical testing, compounding, weathering, microscopy, and surface characterization. "We support plastics processors under high time and cost pressure to qualify new materials faster," says Dr. Stefan Girschik, Chief Executive Officer at Meraxis.

The laboratories, spanning 1,250 m^2, cover the full chain from raw material characterization to product qualification. Services include sampling for the automotive sector and application-related testing of furniture and industrial components, conducted on both standardized specimens and functional samples. Tests comply with international standards and OEM requirements (DIN EN ISO 17025:2018), including mechanical, thermal, chemical, and aging tests.

A key focus is on recyclates, composites, and plastics, enabling converters to replace virgin materials without compromising quality or process reliability. "The laboratory complements Meraxis' full-service portfolio, contributing independent testing expertise and over two decades of experience," says Dr. Dominic Tilgner, Director of Advanced Materials and Applications at Meraxis.

With these services, Meraxis provides efficient, standard-compliant qualification of polymers, compounds, recyclates, and coated components, strengthening its role as a full-service partner for the plastics industry.

meraxis-group.com

Dr. Stefan Girschik, Chief Executive Officer at Meraxis

Dr. Dominic Tilgner, Director of Advanced Materials and Applications at Meraxis

WHAT DOES THE EU-INDIA TRADE DEAL MEAN FOR THE AUTOMOTIVE SECTOR?

After nearly two decades of negotiations, the European Union and India have finally announced a long-awaited trade agreement. The deal lands at a moment of heightened geopolitical and economic uncertainty. Transatlantic relations are strained, the United States has embraced a more openly nationalist trade posture, and global markets are increasingly shaped by China's dominance in manufacturing and exports. Against this shifting backdrop, Brussels and New Delhi have chosen to move closer, with European Commission President Ursula von der Leyen framing the agreement as a "tale of two giants".

Yet beyond the symbolism and diplomatic choreography, the key question remains a more practical one: what does this deal actually change, particularly for the automotive sector, long one of the most sensitive and politically charged areas of EU-India trade?

The automotive sector as the main beneficiary

The automotive industry has emerged as the most visible beneficiary of the agreement. Under the deal, tariffs on EU-manufactured cars exported to India will be reduced from levels as high as 110% to 10%, representing the most significant opening India has ever granted to European carmakers. For an industry squeezed between rising U.S. import tariffs and an increasingly ruthless price war in China, the Indian market offers a welcome, if carefully controlled, alternative.

Market access, however, will remain tightly managed. The reduced tariff rate will apply only within an annual quota of 250,000 vehicles, a figure six times larger than the quota agreed under the EU-UK trade deal, but still limited when set against the scale of India's domestic market. Safeguard clauses are designed to shield local manufacturers. Cars priced below €15,000 will continue to face higher duties, effectively protecting the mass-market segment where price sensitivity is greatest. Electric vehicles are subject to a transitional regime, including a five-year grace period, reflecting New Delhi's determination to nurture its still-fragile EV ecosystem.

A vast but unforgiving market

The scale of the opportunity should not obscure the difficulty of the terrain. India is already the world's third-largest car market after the United States and China, with annual sales of around 4.4 million vehicles, and projections suggest it could reach nearly 6 million units a year by 2030. Yet it remains one of the most protected major automotive markets in the world. Import duties have long stood at 70% for cars priced below $40,000 and up to 110% for higher-end models, shaping a competitive landscape that strongly favours domestic and Asian manufacturers.

European carmakers today account for less than 3% of India's passenger vehicle market. The sector is dominated by domestic firms such as Tata Motors and Mahindra & Mahindra, alongside Japanese and South Korean brands, most notably Suzuki and Hyundai, which together command roughly two-thirds of total sales. Their success rests on compact, affordable and reliable models tailored to local demand, such as the Maruti Suzuki Wagon R, a mainstay of India's price-sensitive market.

Analysts are therefore cautious about the deal's immediate impact. While the tariff cut is substantial on paper, its benefits are likely to accrue primarily to the premium segment. As Stefan Bratzel of the German automotive research group CAM observed, this is "a start", but one that mainly facilitates exports of high-end European vehicles. In a market where demand revolves around affordability and durability, European manufacturers, whose models tend to be more expensive, face structural disadvantages in the volume segment.

Strategic relevance beyond immediate gains

Still, the agreement carries strategic weight that goes beyond short-term sales figures. For European carmakers with limited production footprints in India and annual sales still measured in the tens of thousands, the deal offers a foothold in one of the few large markets where long-term growth potential remains substantial. Industry associations and corporate leaders have welcomed the improved access, even while acknowledging that many barriers remain firmly in place. Germany's VDA automotive association described the agreement as a necessary step in an increasingly protectionist global environment. The chief executives of Volkswagen, Mercedes-Benz and BMW all publicly endorsed the deal, with Volkswagen indicating it would closely examine the final provisions. Renault, for its part, signalled that India would rise on its list of strategic priorities, pointing to the possibility of deeper investment ties between Europe and the subcontinent.

A cautious opening, not a transformation

Ultimately, the EU-India trade deal does not amount to a breakthrough for Europe's automotive industry, nor does it herald a rapid reshaping of India's car market. Instead, it reflects a carefully calibrated compromise. India preserves strong protections for its domestic industry and its mass-market segment, while Europe gains improved, but clearly bounded, access for its premium manufacturers.

For European carmakers, the agreement offers an opening rather than a solution. Whether lower tariffs translate into lasting gains will depend less on trade concessions alone and more on long-term investment strategies, local production, and the ability to adapt to one of the world's most competitive and unforgiving automotive markets.

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COVESTRO AND XRG FORGE STRATEGIC PARTNERSHIP

Covestro AG closed 2025 by announcing a strategic partnership with XRG P.J.S.C. (formerly ADNOC International Limited), marking a new chapter in the company's growth and transformation. The agreement was accompanied by a capital increase of €1.17 billion, strengthening Covestro's resources to advance its "Sustainable Future" strategy.

XRG, an international investment company headquartered in Abu Dhabi and wholly owned by ADNOC, has an enterprise value of $150 billion. Its investments span natural gas, chemicals, and scalable energy solutions that support AI and industrial applications worldwide. The group's portfolio includes both operating and non-operating interests in assets and companies that address the growing global demand for energy and essential chemicals, which are key to sustainable economic development.

Dr. Markus Steilemann, CEO of Covestro, commented:"With the closing of this transaction, we are ready to embark on a joint journey with XRG. As a strong, long-term partner, XRG will help Covestro accelerate its transformation and create lasting value for our customers, employees, and stakeholders globally."

He noted that the deal required extensive negotiations due to its unprecedented complexity and scale in the European Union. "This transaction is the first of its kind at this level. We took the time to craft an investment agreement that meets the objectives of both parties and navigated key regulatory processes, including the EU's Foreign Subsidy Regulation (FSR), which had never before been applied to a transaction of this magnitude."

Steilemann emphasized that Covestro's governance and culture will remain intact. The company will continue to operate under an independent management board and a supervisory board with defined quotas, with these arrangements secured through 2028. "This is a strategic partnership, not just a synergistic deal. While we see opportunities to collaborate, particularly in innovation and digital infrastructure for chemical research, Covestro's structure, values, and long-term vision remain unchanged."

The closing of the transaction marks the official start of the partnership, following all regulatory approvals and prior agreements, positioning Covestro and XRG to pursue growth together while maintaining operational independence.

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EU BIOECONOMY STRATEGY: BIOPLASTICS AT THE HEART OF EUROPE'S INDUSTRIAL TRANSITION

EU Commission embeds biobased plastics in a coherent PPWR framework and prepares legally binding targets, signaling that biobased plastics are now an active priority of EU industrial policy.

European Bioplastics (EUBP) welcomes the European Commission's new Bioeconomy Strategy, which confirms – more clearly than ever – that biobased plastics are a strategic pillar of Europe's future industrial base. Additionally, the revised Strategy recognises the sector as a lead market in the transition away from fossil-based materials, acknowledging its potential to scale up the EU bioeconomy.

The Strategy confirms the Commission's vision: replacing fossil-based materials with sustainable biobased solutions, scaling industrial deployment across value chains, and creating predictable demand conditions for innovative materials, including bioplastics. It also embeds biobased plastics within a coherent PPWR architecture, by committing to adopt, in 2027, criteria and targets for biobased plastics— a milestone that can provide much-needed regulatory clarity and long-term investment certainty. We also applaud the approach taken in the strategy to support biobased plastics in complementary with recycled content targets and coherently across sectors and applications.

EUBP strongly supports the Strategy's emphasis on deployment, simplification, and market scale-up. Europe hosts world-class innovation in biopolymers, but companies frequently delay scale-up due to fragmented rules, inconsistent recognition of biobased content, and insufficient demand signals. The measures announced today – from clearer standards and definitions to streamlined authorisations and improved metrology – represent essential building blocks for a coherent Single Market for biobased materials.

The launch of the Bio-based Europe Alliance, set to aggregate up to €10 billion of demand for biobased materials by 2030, is a powerful market-pull instrument. When coupled with the forthcoming Bioeconomy Investment Deployment Group, it can reduce investment risk, enable bankability of first-of-a-kind facilities, and anchor production capacity in Europe rather than abroad.

To make these instruments fully effective, EUBP encourages the Commission to rapidly operationalise the Strategy's commitments across

product, packaging, waste, and environmental and climate legislation. Ensuring that biobased content, biodegradability, compostability and design-for-circularity are recognised consistently – alongside reuse and recycling – is essential to avoid conflicting signals across EU policies.

EUBP also supports the Strategy's reaffirmation of the cascading use principle, which prioritises high-value material applications of sustainable biomass ahead of energy uses. Robust sustainability criteria, traceability, and fair access to secondary biomass streams will be vital to ensure both environmental integrity and industrial resilience. For EUBP, any future sustainability criteria for biomass used in materials should build on existing RED criteria and be matched with strong market-pull measures, so that they incentivise defossilisation rather than adding new barriers.

End-of-Life solutions, like biodegradability and compostability of selected plastic(s) applications that deliver net benefits – including improved biowaste collection, quality composting, and anaerobic digestion – must be scaled in parallel with clear, enforceable product labelling to reduce confusion for citizens, municipalities and businesses. EUBP stands ready to work with the Commission on practical implementation pathways.

"The Strategy sends a strong signal: Europe wants to lead in sustainable materials, and bioplastics are part of that future", said Lorenza Romanese, Secretary General of European Bioplastics. "For the first time, the Bioeconomy Strategy and the Commissioner's call for scale-up converge on a simple truth: Europe will not lead the green transition through innovation alone, but through the capacity to industrialise it — and the genuine commitment towards legally binding biobased plastics targets is the moment where Europe stops admiring its potential and starts activating it".

The reviewed Bioeconomy Strategy is a decisive step towards a more resilient, defossilised and circular European economy. European Bioplastics is ready to collaborate with the Commission and Member States to swiftly operationalise this Strategy so that Europe's strategic vision translates into fast, concrete and scalable industrial deployment.

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RECYCLED PET IN MULTILAYER PACKAGING: A MICROSCOPY METHOD TO REVEAL HIDDEN A/B/A STRUCTURES

AIMPLAS develops a temperature-controlled optical microscopy technique that makes it possible to detect and measure the recycled PET layer in coextruded sheets, overcoming the limits of conventional inspection.

The use of recycled plastic material in packaging is now a well-established reality in the sector. Legislation requires it and, in Spain, starting in 2025, PET packaging must contain at least 25% recycled material in accordance with Royal Decree 1055/2022. However, despite the widespread use of recycled content, certain applications that require monitoring and quantifying its presence still pose challenges.

This is the case of three-layer coextruded PET sheets with an A/B/A structure for the thermoforming of trays, where A is virgin PET and the intermediate layer B is recycled PET. These sheets present a problem when attempting to verify the presence of this multilayer structure or even the thickness ratio. Due to the transparency of the materials and the coextrusion process itself, it is impossible to confirm the multilayer structure using conventional methods. A cross-section of the film, obtained with a microtome and observed under an optical microscope, shows no distinction between the three layers (see Figure 1).

Since sample preparation and optical microscopy offer a fast way to observe layer distribution in multilayer films, it is frustrating when this technique cannot be used for these types of samples.

To address this problem, several tests were carried out in the AIMPLAS characterisation laboratories using different film samples, with cross-section images acquired at various temperatures. Using a special optical-microscopy accessory, a heating stage, it is possible to apply a controlled temperature scan, from room temperature up to higher values (not exceeding 180°C), while observing the film cross section. The PET/RPET/PET sheet is heated in a controlled manner and undergoes the typical thermal transitions of this material.

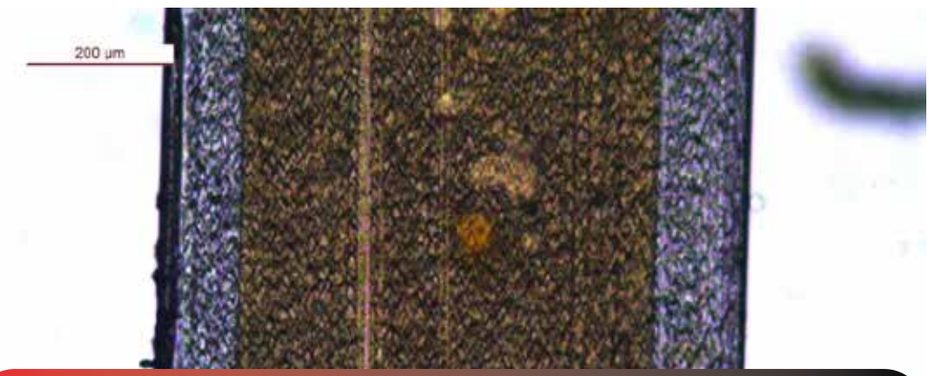

Figure 1. Transmission micrograph at room temperature, 5x objective

The aim of heating the sample is to determine whether the two types of PET behave differently, revealing optical changes that could be used to distinguish them. Observing the sample during the temperature increase provides micrographs of the different stages of PET heating, and it is during cold crystallisation that the three-layer structure becomes visible due to the different nature of the two PET grades used to produce the sheets (see Figure 2).

As shown, the three-layer structure becomes clearly distinguishable at 140°C, allowing verification of the presence of two different materials and even enabling control of their thickness ratio.

Through this approach, AIMPLAS provides a solution to the monitoring challenge presented by this type of film. The method can be useful both for production control and for assessing the quality of the manufactured sheets.

aimplas.es

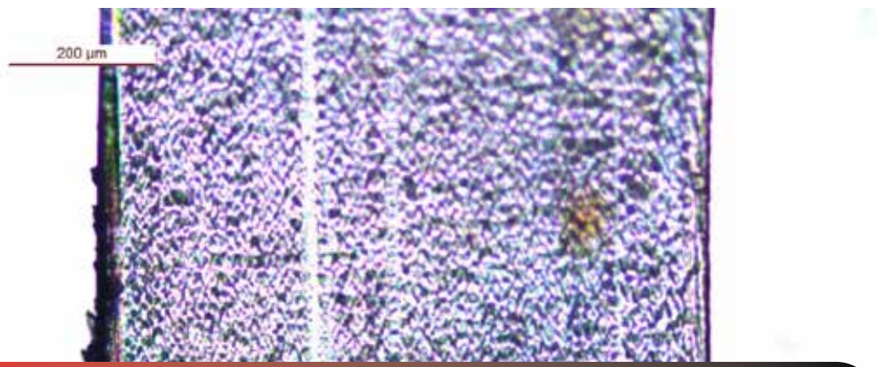

Figure 2. Transmission micrograph at 140°C, 5x objective

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ALPLA SECURES GRANT AND SET UP NEW RECYCLING COMPANY

Four-year innovation project with NTCP kicks off in the Netherlands.

Safe, affordable, sustainable: ALPLA is working on a future-proof solution for food-safe HDPE recycled material. The international packaging and recycling specialist is now evaluating the patented solvent-based process at a pilot plant in Heerenveen in collaboration with the independent technological institute NTCP. The innovation project, which is funded by the Dutch Ministry of Climate Policy and Green Growth, will run for four years. Just in time for the start of the PPWR 2030, the innovative solution will be scaled up to industrial production.

From 2030, packaging in the EU must contain a minimum proportion of recycled material. ALPLA and NTCP are working on a future-proof and affordable solution for plastic food packaging. The patented recycling technology is expected to deliver food-safe HDPE recycled material (rHDPE) on an industrial scale for the first time. Following several years of R&D with successful laboratory results, the two project partners have just started evaluating the solvent-based process at the NTCP site in Heerenveen.

Intensive testing of all process steps of the patented technology will be performed as part of a collaborative innovation project. The aim is to obtain approval from the European Food Safety Authority (EFSA) in the near future. The construction and operation of the pilot plant will provide valuable insights for scaling up the process. ALPLA has set up its own recycling company in the Netherlands for this purpose.

Michael Heyde, Head of Technology Recycling Division at ALPLA, and Martine Brandsma, NTCP's CEO

Centre for Recycling Innovation: The NTCP site in Heerenveen (Netherlands)

Milestone for the circular economy

"To date, there is no certified process in the EU for the production of food-grade HDPE recycled material. Our highly efficient technology for cleaning and processing post-consumer recycled material could be a real game changer," explains Michael Heyde, Head of Technology Recycling Division at ALPLA. The company already produces PET and HDPE recycled material in its own recycling division at 14 locations worldwide, with 400 000 tonnes installed and projected recycling output capacity. ALPLA processes most of this material itself into packaging. The future industrialisation of this innovative technology should enable readily available food packaging made from rHDPE for the FMCG (Fast Moving Consumer Goods) market.

"This cooperation with ALPLA fits perfectly to the core activities and mission of NTCP as an independent knowledge institute, to facilitate and accelerate technology developments with frontrunner parties. We believe that new technologies are needed to completely close the plastics value chain while reducing the amount of waste," emphasises Martine Brandsma, NTCP's CEO.

The pilot project is being carried out with the support of the Dutch Ministry of Climate Policy and Green Growth.

alpla.com
ntcp.nl

The ALPLA and NTCP project team is implementing a pilot plant for solvent-based HDPE recycling in Heerenveen

Recycling specialist ALPLA is launching a pilot project for the production of food-grade HDPE recycled material together with research institute NTCP

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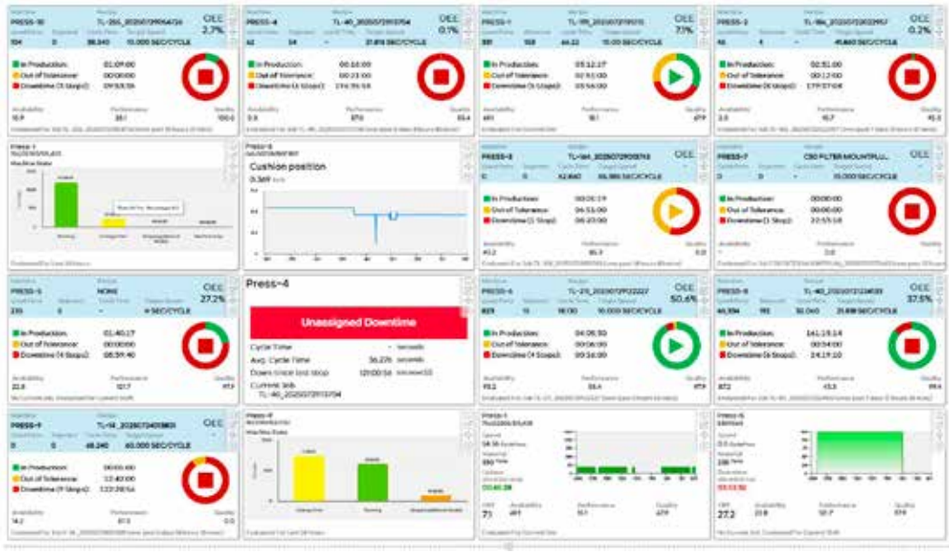
SHIBAURA MACHINE: AGREEMENT FOR THE ACQUISITION OF LWB STEINL

Shibaura Machine has announced the agreement to acquire LWB Steinl, consolidating a European hub for injection molding technologies and systems in Germany.



Shibaura Machine, a Japanese company specializing in injection molding machinery and automation solutions, has announced the signing of the definitive agreement for the acquisition of LWB Steinl, a long-established German manufacturer of vertical injection molding machines for rubber and plastics. The transaction, which follows the recently signed Memorandum of Understanding, will make LWB a wholly owned subsidiary through Shibaura Machine EMEA GmbH under its new name Shibaura Machine LWB.

The acquisition aligns with the company's Medium-term Management Plan 2026, which aims to strengthen Shibaura Machine's industrial and commercial presence in Europe. With subsidiaries already active in Italy and Germany, the group intends to consolidate its position in one of the world's key markets for plastics and rub-

ber processing.
"Our strong presence in America and the Asia-Pacific region forms the basis of our strategic expansion. Europe, and particularly Germany, plays a key role in our growth. To achieve our strategy, we specifically sought a German partner who shared our standards of precision and quality. We identified this partner in LWB Steinl. As a family-owned company, LWB Steinl embodies the values that also define our Japanese corporate culture: trust, appreciation and loyalty," said Georg Holzinger, Managing Executive Officer of Shibaura Machine and future CEO and President of Shibaura Machine LWB. "The new company will operate from a position of strength, focusing on workforce stability and long-term growth. We will be able to offer plastics processors and injection molders sustainable added value: first-class technology and system expertise for fully automated production cells, in-depth knowledge of processes and applications and a strong and loyal customer-service orientation. The Shibaura Machine and LWB brands will remain unchanged, employment contracts will be maintained and no job cuts or relocations are planned. On the contrary, we are deliberately relying on the high level of expertise and experience of our employees in Altdorf to continue serving customers with the quality and precision that, as a Japanese machine manufacturer, we consider essential," Holzinger added.
The LWB production site in Altdorf will become the group's European headquarters and manufacturing hub, retaining all employees and ensuring operational continuity. The integration of LWB's technical expertise, specialized in modular machines for rubber, silicone and elastomers, will allow Shibaura Machine to expand its product portfolio, adding vertical presses and advanced automation solutions alongside its existing electric and hydraulic models.
The operation generates significant synergies. Shibaura Machine's global production network in Japan, China and India will provide cost advantages and access to high-performance components, while LWB will reinforce the company's market presence in Europe. Together, the two entities aim to strengthen their capabilities in developing fully automated production cells, integrating robotics, automation and European digital standards such as OPC UA and Euromap 77/82.

shibaura-machine.com

Shibaura Machine at K 2025: Technologies Presented
At K 2025, Shibaura Machine focused on increasingly efficient, automated and connected injection molding systems, presenting both new machines and digital process-management tools.

All-Electric EC-SXIII
The new generation of all-electric presses was showcased through an automated cell dedicated to producing rPET business card holders. The EC-SXIII platform introduces improvements in kinematics, axis control and energy consumption. The cell integrated handling robotics, in-line logo printing and continuous monitoring via machiNetCloud, demonstrating a fully tracked production flow, from injection to part removal.

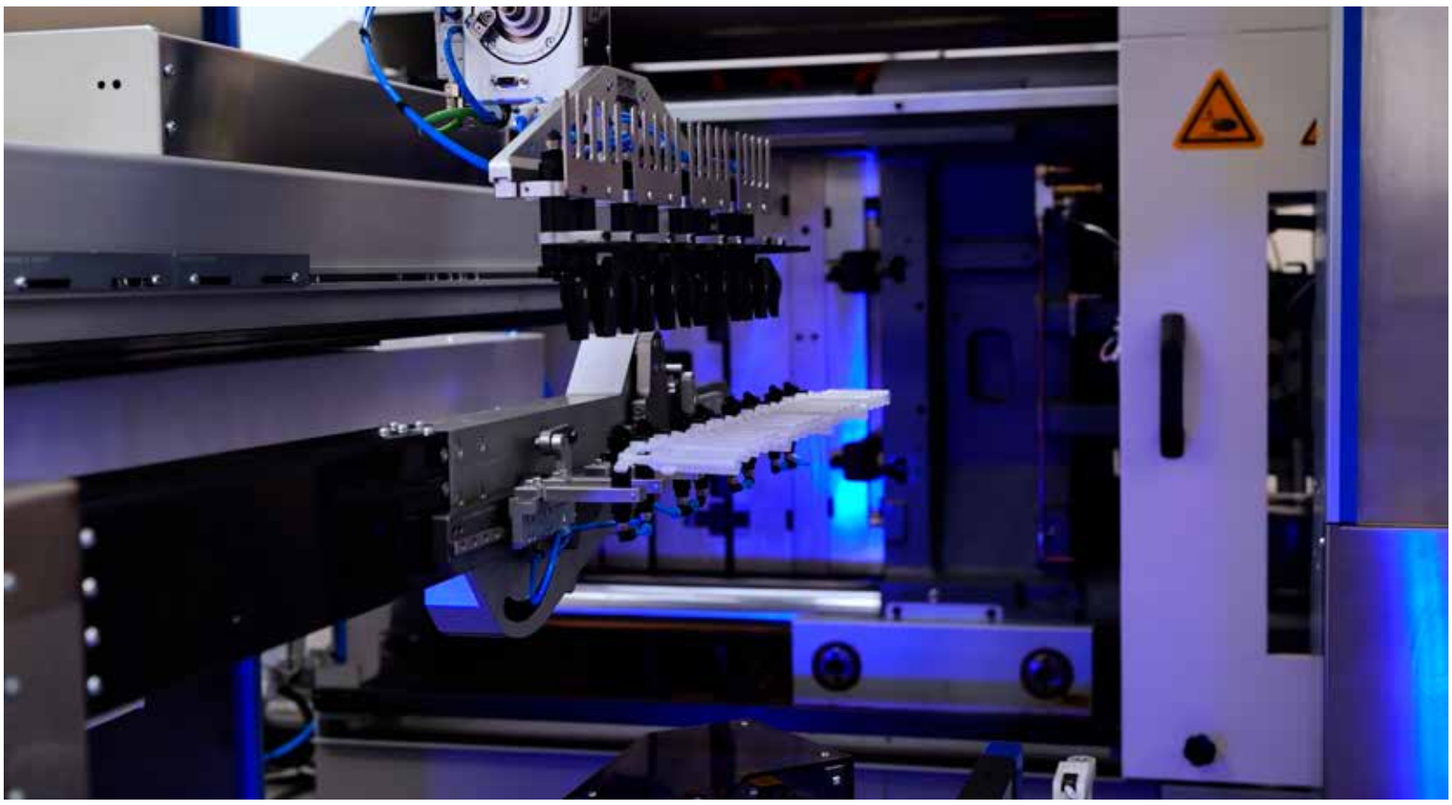
Hydraulic S-GenXt
On the hydraulic front, the S-GenXt 180-7A highlighted the evolution of traditional hydraulic machines toward more efficient systems. The demonstration featured the production of PP containers using IML technology, combining an India-built mold with peripherals designed for precise control of injection and cooling parameters. The S-GenXt series introduces optimized pump management, reducing energy peaks and improving cycle stability.

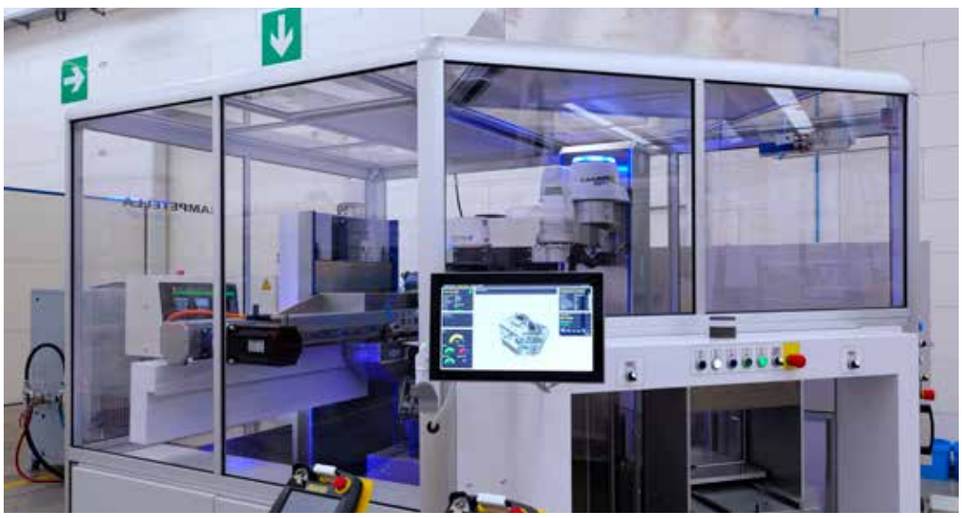
Digitalization: machiNetCloud and LEO
The updated machiNetCloud platform was one of the central technical highlights. The system enables remote monitoring, consumption analysis, detection of process deviations and predictive maintenance based on historical trends.
Also introduced was LEO (Line Efficiency Optimizer), an AI-based module that continuously analyzes machine and cell data, identifies potential issues before they cause downtime and suggests operational actions to increase productivity.

INTEGRATED AUTOMATION SOLUTION FOR MEDICAL AND PHARMACEUTICAL PACKAGING

TOYO Europe and Campetella present a fully electric injection molding and robotic system for 5 ml single-dose strip production in ISO 7 cleanroom environments.

On the occasion of a recent international trade fair, TOYO EUROPE and CAMPETELLA jointly presented an automation solution developed through the combination of complementary expertise, aimed at addressing the specific requirements of the medical and pharmaceutical sectors.
The collaboration, conceived as a demonstrative project, was intended to show how different technologies can be effectively integrated when they share the same objectives: process quality, operational reliability, ease of use, and full compliance with the stringent requirements of regulated environments. This approach makes it possible to address, in a concrete way, the production challenges of a constantly evolving industry.
The system presented at the exhibition is an application dedicated to the production of 5 ml single-dose strips for medical and pharmaceutical packaging. The solution was designed with a strong focus on ease of operation, traceability of production and quality data, fast configuration, and reduced implementation and qualification times—key factors for companies operating in highly regulated environments.
The solution has been integrated with a fully electric TOYO injection molding machine, characterized by high precision, process stability, and energy efficiency. Injection molding machines of this type are now a benchmark for many plastics manufacturers operating in high-complexity sectors, thanks to their ability to ensure minimal deviations, long-term repeatability, and stable performance even in the most delicate processes.
The versatility and compact design of the machine allow integration into limited production spaces and adaptation to moulds and components of varying complexity. The wide availability of tonnage sizes and injection units makes it possible to address a broad range of applications while maintaining high quality standards in the packaging, food, medical, and automotive sectors.
Another distinguishing feature of the presented solution is its focus on sustainability and energy efficiency. The use of fully electric technologies, combined with state-of-the-art servo systems, transmissions, and advanced software management, enables a significant reduction in energy consumption. At the same time, the selection of materials and the adopted design principles aim to minimize the risk of environmental contamination, a particularly critical aspect in medical applications.
From an automation perspective, the system is based on a proven Campetella robotic configuration combining a side-entry robot and a SCARA robot, both freely programmable. This architecture enables fast, precise, and repeatable movements, ensuring production continuity and process control even in the most sensitive applications. The entire automation cell is built in a medical execution and is suitable for use in ISO 7 cleanroom environments, fully meeting the cleanliness, safety, and reliability requirements of the medical and pharmaceutical sector.
For Campetella, this solution represents a concrete example of its key success factors applied to the medical and pharmaceutical sector. The project highlights, in particular, a cost advantage compared to traditional medical automation suppliers, while maintaining high standards of service quality and operational reliability. The flexibility of the proposed solutions allows rapid adaptation of the automation system to the customer's production and regulatory requirements. German and European engineering performance and service





levels, combined with a more competitive price positioning, represent the distinctive strength of Campetella's approach.

From a maintenance standpoint, the proposed configuration also offers tangible benefits. The high reliability of the systems and the reduced number of wear components help limit routine maintenance activities, contributing to lower machine downtime and reduced overall operating costs.

The collaboration presented at the trade fair between Campetella and TOYO stands as an example of coherent, functional technological integration aligned with the real needs of the medical market. A demonstrative project that highlights the value of integrated automation and the ability to effectively respond to the challenges of a highly regulated and increasingly competitive sector, while keeping operational simplicity, process quality, and industrial reliability at its core.

toyo-europe.com
campetella.com

TECNO SYSTEM: MEDICAL TUBING MICRO-EXTRUSION LINES FOR DIFFERENT TECHNOPOLYMERS

Focus on three-layer and multi-layer medical tubing: medical micro-extrusion for advanced tubing applications.

Medical micro-extrusion is a specialised manufacturing discipline in which dimensional accuracy, material behaviour and process repeatability are strictly interconnected. The production of medical tubing for diagnostic, therapeutic and minimally invasive applications requires extrusion lines capable of maintaining stable geometries at very small diameters, while ensuring reliable processing of a wide range of medical-grade and engineering technopolymers.

Tecno System's approach

Within this context, Tecno System develops dedicated medical micro-extrusion lines designed for the production of mono-lumen, multi-lumen and functionally differentiated tubing, with particular focus on three-layer and multi-layer configurations. These extrusion systems are engineered to support applications where different material properties and functional requirements must be combined within a single tube.

Three-layer tubing

Three-layer medical tubing represents a consolidated solution in many medical device applications, allowing the integration of different characteristics within the same product. Typical three-layer structures are designed to combine an inner functional layer, an intermediate structural layer and an outer layer providing mechanical protection, chemical resistance or specific surface properties. This approach enables a high level of functional integration while maintaining a controlled and reproducible extrusion process.

Process control and layer stability

Tecno System's three-layer micro-extrusion lines are designed around precise control of each individual layer during the extrusion process. Accurate temperature management, stable melt flow and synchronisation between the extruders are essential to achieve uniform layer thickness and consistent interlayer adhesion. This becomes particularly critical when processing technopolymers with different rheological behaviours and thermal characteristics.

Dimensional range and tube configurations

The extrusion lines can be configured to operate with a 12 mm medical micro-extruder combined with a dedicated crosshead suitable for tubing in the 0.38 mm to 14 mm outer diameter range, covering both micro-scale and small-diameter medical applications. This configuration supports stable production across a wide spectrum of tube geometries, including mono-lumen, multi-lumen, bump tubing and graduated tubing and variable stiffness.

Processing of medical technopolymers

The extrusion lines are designed to process a wide range of medical-grade thermoplastics and technopolymers, including PA 6/66/11/12, HDPE, LDPE, PEBAX, PVC, PEEK, PSU, POM, SLTP, PUR, EVA, PP, PVDF, PS, PPS, PBT, PET and PETG. Typical application areas include gastro-intestinal devices, dialysis systems, vascular protection, cerebral drainage, pain therapy, tracheotomy, urology, tumour ablation, haemodialysis, as well as peel-away components and introducers.

In particular, three-layer medical tubing produced on these lines is well suited for subsequent blow moulding processes, making it an ideal solution for balloon tubing applications, where controlled material distribution and high resistance to burst pressure are essential.

Supporting stable and repeatable medical production

Through its experience in extrusion technology and its focused approach to medical applications, Tecno System develops micro-extrusion lines that support stable and repeatable production of three-layer and multi-layer medical tubing. This approach enables medical device manufacturers to address increasingly demanding functional requirements while maintaining control over dimensional accuracy, process reliability and long-term production stability.

tecnosystemfe.it

IDENTITY CARD

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info@tecnosystemfe.it
www.tecnosystemfe.it

TECHNICAL DATA – 3 LAYER MEDICAL MICRO EXTRUSION LINE

Extruders size	12 mm
Flow control unit	0–200 mbar / 0–500 mbar
Crosshead	0.35 mm – 14 mm
Sizing unit	ERV50/3
Servo haul-off / cutter	TT300 / TBR
Tubes configuration	Mono-lumen, Multi lumen, Bump tubing, Graduated tubing, Balloon tubing, variable flexibility
In-line measurement system	Zumbach ODAC + UMAC (Bump tubing SW as option)
Processed materials	PA 6/66/11/12, HDPE, LDPE, PEBAX, PVC, PEEK, PSU, POM, SLTP, PUR, EVA, PP, PVDF, PS, PPS, PBT, PET, PETG

MARIS EXTRUDERS TO PRODUCE ADHESIVES

Regarding the machineries and related processes to produce adhesives, we ask some questions to the technicians of proven experience working at Maris Technological Center.

In today's rapidly evolving adhesives industry, process innovation and product quality have become inseparable. The growing demand for higher performance, improved workplace safety, and greater environmental sustainability is pushing manufacturers to rethink traditional production models. In this scenario, co-rotating twin-screw extrusion technology is emerging as one of the most advanced and versatile solutions for adhesive manufacturing, progressively overcoming the limitations of conventional batch systems. To explore the technical advantages, practical applications, and future perspectives of this technology, we spoke with the specialists at the Maris Technological Center, a center of excellence dedicated to the development of innovative extrusion solutions. From Hot Melt Pressure Sensitive Adhesives (HMPSA) to solvent-based systems and the latest "Total Solid Adhesives," their field experience provides valuable insight into how automation, in-line rheological control, and patented plant configurations are redefining industry standards.

What emerges is a high-level technical discussion highlighting not only improvements in product consistency, flexibility, and process reproducibility, but also significant benefits in terms of safety, emission reduction, and cost optimization. A conversation that clearly demonstrates how advanced extrusion technology can transform a complex manufacturing challenge into a controlled, efficient, and future-oriented process.

Why use a co-rotating twin-screw extrusion line for this type of application?

There are three different advantages: the first one is that Maris's extruder is modular and runs in a continuous process. This type of work improves the reproducibility of the product features, granting a constant quality of the adhesive produced. The second one concerns the screws geometry; thanks to the self-cleaning shape of each screw element, it is possible to process different formulations (different viscosities, different colors), without excessive consumption of materials. Finally, the residence time inside the extruder is very short and therefore, the risk of thermal degradation is dramatically reduced, compared to the batch process.

Which is the most used system to produce adhesives?

While in the past the adhesives were mainly produced with discontinuous systems (batch), now the co-rotating twin-screw extruders are being used increasingly. It should be kept in mind that the discontinuous systems involve several complications and critical issues in terms of both the product quality and the safety at the workplace. At this point, two examples can be useful: the Hot Melt Pressure Sensitive Adhesive (HMPSA) and the Solvent Based Adhesives. HMPSA are materials which need high temperatures to be processed. An organic substance left in such thermal conditions and in an open container, produces oxo and thermal-degradation phenomena, resulting in molecular weight variations inside the same stock of material. In this case, using a co-rotating twin-screw extruder to produce HMPSA improves the

quality of final product. As far as Solvent Based Adhesives are concerned, the greater advantages are in terms of safety. In fact, the co-rotating twin-screw extruder collects the solvent in a closed system, reducing the solvent released into the workplace and into the atmosphere. The result is less pollution and reduced costs of solvent recovering. It should not be forgotten, finally, that a batch system requires numerous manual operations, as well as cleaning and reproducibility difficulties.

The example concerning Solvent Based Adhesives is very interesting and well worth further attention.
How does Maris co-rotating twin-screw extruder realize this process?
We have developed and patented two different processes. The first one, a single-step machine, is certainly an out-of-the-ordinary system! This extruder has a length of 100 L/D, compared to the average length of the extruders, which is normally between 40 and 52 L/D. The further development of this system is a two-steps machine, resulting in higher production flexibility and production capacity.
Both processes have been tuned together with a long-time customer. In their plant, we have installed two lines to produce Solvent Based Adhesives, replacing the outdated batch systems. From the quality point of view, the adhesives produced are comparable with those produced with the batch system, with the further advantage that all types of natural rubbers can be processed with a reduced quantity of solvent (with positive effects on environment and workplace safety, as well as costs saving). Furthermore, the system is fully automated: from the mill, which reduces the natural rubber to a size suitable for the extruder feeding, up to the coating machine.

The natural rubber has different properties depending on its geographical origin and the characteristics may be related to seasonal factors; how is it possible to keep constant the final product properties?
The key point is to keep the viscosity constant. This can be done by means of an on-line rheometer, which continuously monitors such property. In this way, the control system automatically adjusts the process parameters, such as the solvent distribution and the screw speed. Therefore, the quality of the material entering the coating machine is always constant.

This suggests that the operator intervention is minimal.
Exactly. Of course, the simultaneous presence on the line of different machinery working together requires suitable attention levels and monitoring. However, the effort of the operator is quite reduced.

We spoke about "flexibility". How does the co-rotating twin-screw extruder reach a better flexibility?
For example, during the two-steps production process of Solvent Based Adhesive, the first extruder processes the solid components of the recipe, with just little quantity of solvent. In the second extruder, the quantity of solvents required by the final recipe is added. The sheer stress conditions of the material inside the two extruders are quite different, allowing better flexibility operations in terms of materials choice and output.
For the HMPSA, the flexibility of our extruder concerns resin feeding: the total amount of resin can be injected in different sections of the barrel. Thanks to this solution, the number of workable recipes can be increased using a single production line.

Which are the new trends in adhesives production?
The interest for the so-called "Total Solid Adhesives" is increasingly growing.
These adhesives are based on natural rubber without solvent. This type of adhesive can be produced with our machines, too, and we have already tested some recipes with our customers.

How does Maris Technological Center support the companies for developing new projects? Is it possible to carry out some tests?
Our Center is at complete disposal to carry out process trials using our customers' materials. We are ready to support each type of project thanks to four lines, complete with the necessary equipment. The first step for the organization of the trials is to identify, together with the customers, the most interesting formulations. At this point, as soon as the samples quantity to be produced has been defined, we will prepare the correct line configuration for the tests. The customer will be involved during each step and can be present. It is therefore an experience of absolute and constructive sharing of information and data, which leads to professional growth for both parties involved in the project; in this way, success is guaranteed!

mariscorp.com

JEC WORLD 2026 READY TO BEGIN

From 10 to 12 March, Paris will host the 2026 edition of JEC World. Here are the highlights of the event.

The 2026 edition of JEC World, the international benchmark trade fair for the composites industry, is approaching and will take place in Paris from March 10 to 12. The Paris-Nord Villepinte venue will once again bring together the entire composites value chain, from production technologies to advanced applications across multiple industrial sectors.

After a highly attended 2025 edition, JEC World 2026 will welcome major industrial groups, SMEs, research centres, universities, startups and investors. The organisers expect more than 1,400 exhibitors and around 46,000 professional visitors from over 100 countries.

The exhibition will showcase technologies and solutions spanning aerospace, automotive, energy, construction, marine, sports and leisure, with a particular focus on sustainable materials, low-impact processes and new recycling and circularity techniques.

Knowledge, technologies and networking

"JEC World is not just an exhibition. The content programme includes three days of conferences, panel discussions and technical presentations across three stages. The sessions will address key topics for the industry, including the evolution of manufacturing technologies, sustainability, material circularity and the pathway to carbon neutrality," the organisers said in the press announcement released a few months before the event.

The programme dedicated to startups remains one of the pillars of the show. JEC Startup Booster will select 20 finalists from over 100 global applications. These young companies will present their innovations to a jury composed of industrial experts and investors. The expanded Startups Village will host more than 60 emerging deep-tech and advanced-materials companies. In parallel, Investor Day will facilitate direct interaction between startups and investors through dedicated meetings and guided tours.

The Business Meetings programme, the organisers note, will help connect exhibitors with qualified buyers, optimising participants' schedules and supporting collaboration across the value chain. "The exhibition will also feature live demonstrations in an expanded area, with machinery and processes operating throughout the three-day event."

The thematic areas will offer a structured overview of the composites industry's main fields of interest. The Circularity Village will highlight solutions for recycling, repair and reuse of composite materials. The Bio-Materials Village will present bio-based innovations and biocomposites, including projects developed in collaboration with the Alliance for European Flax-Linen & Hemp. The SMEs Village will showcase the capabilities and agility of small and medium-sized enterprises, while the Startups Village will concentrate the sector's most promising emerging innovations.

Innovation at the centre

Among the most anticipated features, the Innovation Planets will once again display a selection of components and applications identified throughout the year by the JEC team worldwide, illustrating how composite materials are driving the shift toward lighter, more efficient and more sustainable technologies.

The official preview of the 2026 edition will take place on 12 January with an online streaming event. It will outline the key features of the fair, announce the Startup Booster finalists and reveal the winners of the JEC Innovation Awards, the industry's most prestigious recognition.

jec-world.events

CANNON SHOWCASES NEXT-GEN COMPOSITE TECH AT JEC WORLD 2026

At JEC World 2026, CANNON will present integrated solutions for thermoset and thermoplastic composites, highlighting aerospace and defense applications, intelligent mold thermoregulation, circular polyurethane manufacturing, and high-tonnage compression molding innovations.

At JEC World 2026, the leading global exhibition for composite materials held March 10-12 in Paris, The Cannon Group will present a portfolio of integrated manufacturing technologies developed through long-term research and development investments. These solutions are designed to improve efficiency, process control, and performance for thermoset and thermoplastic composite applications, while enabling flexible, energy-efficient, and industrially scalable production processes.

Solutions for aerospace and defense composites

CANNON will emphasize its capabilities in aerospace and defense composite manufacturing, where reliability, performance, and quality are critical. The Group will present validated solutions for both thermoplastic and thermoset materials, including advanced thermocompression lines, patented vacuum technologies, and controlled resin injection systems. These technologies enable the production of lightweight, high-performance composite components while meeting stringent aerospace and defense standards.

NEXUS: The intelligent mold thermoregulation system

A highlight of the exhibition is NEXUS, CANNON's patented mold thermoregulation system. NEXUS leverages composite materials as heating elements integrated into molds, enabling precisely controlled thermal zones directly on the mold surface. Benefits include shorter cycle times, improved energy efficiency, and advanced process optimization, particularly for RIM and thermoset applications, offering manufacturing possibilities beyond conventional heating systems.

POSSIBLE: Advancing circularity in polyurethane composites

CANNON will also present POSSIBLE (PrOduce SuStainabLE Industrial Bodies), a project focused on recycling and reusing polyurethane (PU) and PU glass-fiber reinforced composites. Recycled foams and composite granulates are reintegrated as secondary reinforcement materials in new PU formulations, supporting a circular manufacturing approach. Dedicated process solutions allow recycled materials to be reintroduced in powder or granular form, maintaining process stability and component performance.

High-tonnage compression molding expertise

CANNON will highlight its short-stroke press concepts, developed with TEP - Taylor Engineering & Plastics, delivering high performance and precision even in environments with limited ceiling height. Compact machine design, flexibility, and productivity support a wide range of composite manufacturing applications. Visitors can find CANNON at Booth 5M72 during JEC World 2026.

cannon.com

KRAUSSMAFFEI: INNOVATIONS FOR LIGHWEIGHT CONSTRUCTION AND SURFACE TECHNOLOGY

From pultrusion and LFI technologies to large-format 3D printing with high-performance plastics, the company showcases end-to-end solutions for industrial composite production.

KraussMaffei will be showcasing its comprehensive expertise in the field of composites at the leading trade fair JEC WORLD in Paris (March 10-12, 2026, Hall 6, Booth D51). A wide range of exhibits will be on display, including sandwich underbody protection, an LED-illuminated vehicle front panel, and 3D-printed high-temperature components and blanks made of PEEK, PESU, or PEI. The specially developed printCore high-performance extruder, the heart of the additive manufacturing systems, will also be on display at the booth. For lightweight construction and surfaces, KraussMaffei combines reaction engineering, additive manufacturing, and injection molding processes and is the only company in the industry to develop production lines in-house. This enables the creation of optimal project solutions for every application – from development to series production.

Individual technology solutions for every application

In the construction sector, where steel is increasingly being replaced by corrosion-resistant and therefore more durable materials, pultrusion (fiber-reinforced extrusion) comes into its own – for example in concrete reinforcement, which will be on display at the booth. Pultruded profiles from systems manufactured by KraussMaffei subsidiary Pultrex also offer innovative solutions for renewable energies in the form of solar and wind power plants. These components are lightweight, durable and can withstand high loads.

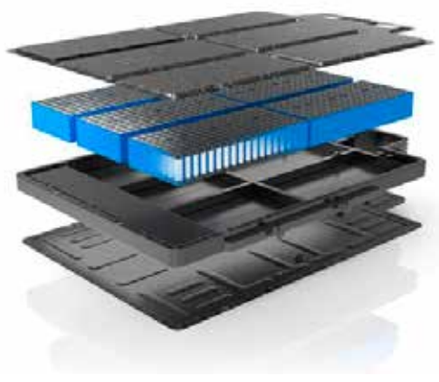
The exhibit of a complex cladding component for commercial vehicles uses the long fiber injection (LFI) process, which is suitable for large-area structural parts. For this purpose, cut glass fibers are coated with polyurethane (PUR) and pressed into the cavity to form the molded part. This technology combines cost efficiency for small production quantities with a wide range of surface design options such as deep-drawn films or imitation leather.

In an underbody protection system also on display at the trade fair stand, an LFI panel forms the core, which is then wrapped in glass fiber mats, coated with the matrix, and also pressed into shape. The result is an extremely lightweight and torsion-resistant large-format sandwich component. It complements the battery housing for electric vehicles (manufactured using the high-pressure RTM process) that was shown at last year's JEC. The KraussMaffei team uses additive manufacturing processes to develop such structures, as 3D printing allows large-format, thin-walled components to be produced efficiently. The prototypes and functional models created in this way enable early design and process validation. This allows geometries to be varied quickly, components to be pre-dimensioned, and development times to be significantly reduced.

Since electric cars do not need a large air intake on the radiator, the front of the vehicle can be completely redesigned – as in the case of the "Radiator Grill 2.0" with built-in radar and video technology. The surface is crucial here, as it must be extremely robust to withstand stone chips and daily wear and tear. The ColorForm process, in which the component is coated with a self-healing PUR layer after injection molding, offers the best conditions for this. KraussMaffei supplies the production cell for this from a single source.

Underbody protection as an example of composite material solutions from KraussMaffei.

Battery underbody

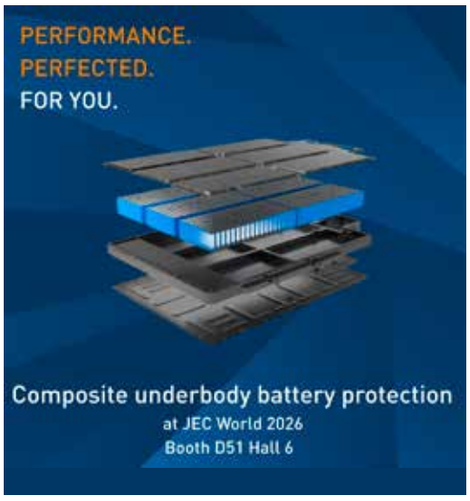


Additive manufacturing with high-performance plastics

The KraussMaffei Additive Manufacturing division develops large-format 3D printing solutions that can also process high-performance plastics such as PEI, PESU, and PPS.

The components manufactured with the powerPrint Flex and powerPrint Plus systems are suitable for technical applications in the aerospace, automotive, model and mold making, and energy technology industries, among others. The extruder and a selection of additively manufactured, large-format components will be presented at the trade fair booth, demonstrating the technological capabilities, material expertise and application range of the additive manufacturing solutions.

High-performance extruder printCore



With powerPrint Plus and powerPrint Flex, KraussMaffei addresses the requirements of efficient, industrial additive manufacturing. At the heart of both systems is the proprietary printCore extruder, which enables processing temperatures of up to 400 °C and covers a very wide discharge range – from a few hundred grams per hour to 70 kg/h. This allows both filigree, thin-walled structures and large components to be manufactured in stable series and pre-series processes.

With its fixed, thermally insulated build chamber, powerPrint Plus offers the best conditions for general 3D printing. Precise extrusion control ensures reproducible component quality, high material efficiency, and reliable processing of technical and highly filled thermoplastics.

powerPrint Flex stands for maximum modularity. The system can be adapted to specific projects and, in addition to the additive process, can also integrate milling operations, additional axes, or rotary tables. This makes it particularly suitable for complex applications, hybrid manufacturing strategies, and individual component geometries where additive manufacturing and mechanical post-processing are combined in a single cell.

The additive processing of high-performance plastics requires a comprehensive understanding of material properties such as thermal behavior. KraussMaffei contributes this knowledge to all projects and, as a service partner, also supports its customers in material qualification.

System solutions from concept to series production

KraussMaffei offers complete system solutions for all technologies and applications, from component optimization and system and process development to ongoing series production. At JEC, KraussMaffei experts will be on hand to advise visitors and find the optimal solution for individual requirements.

kraussmaffei.com

PLASMATREAT: RELIABLE ADHESION OF COMPOSITE MATERIALS WITH PLASMA TECHNOLOGY

Using compressed air and electricity to improve the processing of lightweight materials.

At Jec World 2026, Plasmatreat will present its plasma technology for the industrial pretreatment of composite materials in Hall 5, Booth G65, in Paris from March 10 to 12, 2026. The focus will be on the reliable adhesion of composite materials with plasma technology by using compressed air and electricity to improve the processing of lightweight materials. The focus will be on applications in the aerospace and automotive industries, where fiber-reinforced plastics and hybrid material systems are becoming more relevant. Visitors will be able to see firsthand how carbon fiber reinforced plastic (CFRP) and thermoplastic components are prepared with plasma for subsequent processes, such as bonding, painting, or sealing. Headquartered in Steinhagen, Germany, Plasmatreat GmbH is a leader in developing and manufacturing industrial plasma technology under atmospheric and low-pressure conditions.

Processing Challenges of Composite Materials

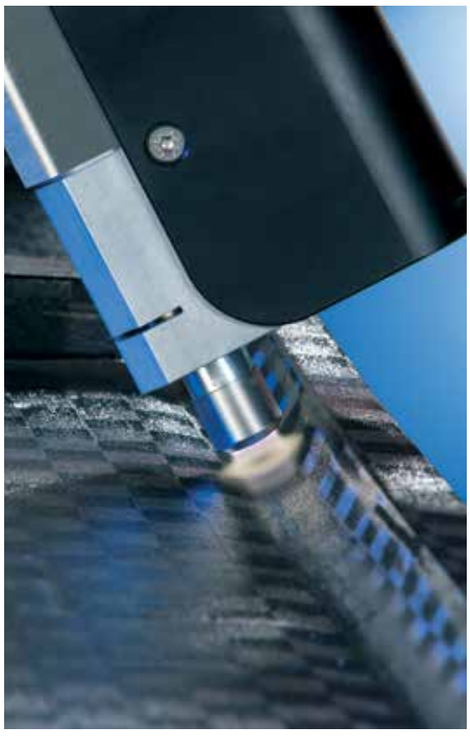
In the aerospace and mobility industries, lightweight composite materials, such as carbon fiber reinforced plastics (CFRPs), thermoplastics, and hybrid structures, are being used more frequently to reduce weight, increase efficiency, and improve performance. However, the low surface energy of these materials often makes it difficult for adhesives, coatings, and sealants to adhere reliably. Therefore, targeted pretreatment of the surfaces before further processing is essential.

Conventional methods, such as mechanical grinding or the use of chemical primers, often have limitations when it comes to large or geometrically complex components. These methods are difficult to control and automate, time-consuming, and subject to environmental and occupational safety regulations.

Plasma Technology for Cleaning, Activation, and Coating

Plasmatreat's Openair-Plasma technology operates under atmospheric pressure and uses only compressed air and electrical energy to enable selective, reproducible surface cleaning and activation. It removes organic contaminants and increases surface energy without altering the material's fundamental properties. A new application in the open air sector is HydroPlasma, which introduces distilled water into the plasma jet. This effectively and reliably removes organic and inorganic residues without damaging the material surface.

In addition to atmospheric plasma treatment, Plasmatreat relies on its Aurora-Plasma low-pressure plasma technology for particularly uniform, full-surface treatment in the aerospace industry. Complex and large-format components are cleaned and activated homogeneously under defined process conditions in closed vacuum chambers. This process is ideal for components that are structurally significant and require high levels of reproducibility, process stability, and quality assurance. PlasmaPlus technology can apply nano-thin functional coatings at atmospheric or low pressure. These coatings can be used as environmentally friendly bonding agents, for example, and are an alternative to conventional chemical primers.



Process Reliability and Quality Assurance

In the industrial processing of lightweight materials, quality assurance and the reproducibility of treatments are important for manufacturers. Plasmatreat uses its Plasma Control Unit (PCU) to monitor and document relevant process parameters, such as plasma power, gas flow, temperature, and treatment speed, in order to achieve this. These features enable consistent treatment quality, support quality assurance, and facilitate the integration of plasma technology into automated production lines and qualified manufacturing processes.

Plasma Live Demonstration at JEC World

In Hall 5, Booth G65 in Paris, Plasmatreat will demonstrate Openair-Plasma treatment live. Plasma experts will activate CFRP and other composite materials in front of visitors. They will demonstrate the effect of plasma activation and the increased wettability associated with the treatment using various methods. The demonstrations will show how adhesion processes in bonding, painting, or sealing can be stabilized, even with complex component geometries. Visitors are also invited to discuss specific applications for Openair-Plasma or Aurora-Plasma directly with the experts on site.

A Wide Range of Applications for Sustainable Technology

Plasmatreat's plasma technology is used throughout the aerospace industry's value chain, including engine and structural components, fuselage and wing parts, and interior and functional components. Both large-area treatments and selective applications, such as in adhesive grooves, are possible. Improved adhesion increases resistance to corrosion, erosion, and mechanical stress, which can extend the service life of coatings.

Plasmatreat's plasma processes do not require solvents or VOCs, generate no hazardous waste, and can be integrated into existing production environments. Thus, they meet the industry's key requirements for environmental compatibility, automatability, and process stability in the processing of modern composite materials.

plasmatreat.com

MARICELL SHOWCASES MYCELL STRUCTURAL FOAM AT JEC WORLD 2026

Italian core material manufacturer highlights high-performance applications in sports, aerospace, and marine industries.

Maricell, an Italian manufacturer specialized in core materials for composites with more than 40 years of experience, has announced its participation in JEC World 2026. This is one of the most important global events dedicated to composite materials, which will take place from 10 to 12 March 2026 in Paris. The company plans to present the latest results on the mechanical properties of its MYcell structural foam and to review the most demanding applications in high-performance sports where this material acts as a key structural component. At the next edition of the trade fair, Maricell will be present in hall 5 at booth K20. The company is also preparing a technical session entitled "Maricell: top-tier core in competitive sports". The presentation will take place on Thursday, 12 March at 11:30 a.m. in the Agora 5 area (hall 5). The session program will cover current data on the mechanical performance of MYcell and a review of the latest ambitious applications of this structural foam in projects with a high level of engineering requirements.

MYcell structural foam in high-performance applications

MYcell is a structural core material designed as a highly versatile solution aimed at multiple application sectors. The manufacturer cites subsea and marine applications, aerospace and high-performance sports as key fields of use. The common denominator of these applications is the need to combine low weight with high mechanical strength and structural reliability under high load conditions.

According to Maricell, the combination of material adaptability and its mechanical parameters makes MYcell a suitable core for composite structures designed to operate in intensive service environments. In its communication, the company describes this foam as a solution predisposed for applications in which the structure must meet the most competitive challenges in the field of composite materials while maintaining control over weight and stiffness.

High-performance sports as a test bed for core material

Maricell indicates that applications in high-performance sports represent a particularly demanding verification field for MYcell. Examples include bobsleighs, canoes, skis, surfboards and catamarans. Each of these disciplines is treated as an extreme test environment, where it is crucial to simultaneously meet the requirements concerning low weight, strength and structural reliability of composite components.

In such applications, structural foam acts as a core in laminates with complex geometries and a high level of dynamic loading. Maricell emphasizes that in these conditions MYcell functions as a top-class core material, capable of delivering high performance even under the most demanding structural loading profiles. During the technical session at JEC World 2026, case studies will be presented to illustrate the material's ability to meet increasingly stringent design criteria in high-performance sports.

Scope of the presentation at JEC World 2026

The announced technical session will include updates on the mechanical performance of MYcell foam. Information on the latest applications in highly competitive sports will also be provided, including case studies showing how the material responds to growing structural demands placed on composite structures. The event is intended for engineers, designers and end users interested in the selection and validation of core materials in applications where the mass-to-strength ratio and stability of service properties are crucial.

The communication highlights that advanced sports disciplines such as bobsleigh, canoeing, skiing and sailing require structural performance parameters that do not allow compromises between weight, mechanical strength and structural reliability. Operating conditions in these areas create a reference environment for assessing the effectiveness of core materials used in composites.

Manufacturer's perspective

The importance of high-performance sports applications for the development of MYcell was emphasized by Massimiliano Demenego Della Mora, chief executive officer of Maricell. He pointed out that participation in JEC World 2026 will be an opportunity to present the role of the foam as a benchmark in applications with the highest level of requirements.

"Our presence at JEC World 2026 will be an opportunity to demonstrate that MYcell has now become a benchmark in highly competitive sports applications. The performance required by disciplines such as bobsleigh, canoeing, skiing and sailing is extreme and allows for no compromise; lightness, mechanical strength and structural reliability must coexist at the highest level," said Massimiliano Demenego Della Mora, chief executive officer of Maricell. "The results we are presenting in Paris are testament to the tireless work of our R&D team and Maricell's ability to support the most ambitious partners in developing increasingly high-performance composite solutions."

maricell.it

WICKERT: THERMOFORMING PRESS BOOSTS AIRCRAFT STRUCTURAL COMPONENT OUTPUT BY 80%

Particularly efficient and fast, it is designed for the production of aircraft structural components from composite materials. Its semi-automated concept dramatically increases productivity.

Wickert Maschinenbau has developed a new thermoforming press for the production of aircraft structural components from composite materials. The semi-automated concept enables productivity increases of up to 80%. It encompasses all stages, from raw part loading and preheating to the actual pressing process and unloading.

The use of an industrial robot in conjunction with a customizable handling system allows for the flexible processing of components of different sizes. Since the hot parts are handled without human intervention, the operator's workload is reduced.

The new thermoforming press is suitable for numerous composite materials used in the manufacture of structural components in aircraft construction. These include carbon fiber-reinforced thermoplastics such as polyphenylene sulfide (PPS) and polyetheretherketone (PEEK). All presses are modular in design and are customized with press forces between 20 and 100,000 kN. WICKERT will be providing more information at JEC from March 10 to 12, 2026, in Paris at booth K 92 in hall 5.

Semi-automated system with WKP 300 thermoforming press with 300 kN pressing force for aircraft structural parts

Highly flexible component handling

The new production plant from Wickert Maschinenbau relies on automated component handling to maximize precision and efficiency in the production process. An industrial robot moves the pre-assembled composite blanks fixed to universal clamping frames within the system safely, quickly, and precisely. This gives the press a high degree of flexibility, as the clamping frame is designed for components of different sizes up to 1,100 mm in length.

Wickert developed the frame components and the grippers of the industrial robot itself, ensuring precise, safe, and repeatable handling. The use of magnetic clamping plates for quick tool fixing significantly reduces setup times, further increasing efficiency.

Customized control system

The system's customizable control system allows recipe changes to be carried out quickly and effortlessly. It also handles data logging and the recording of component-specific process data, thus ensuring complete traceability. This ensures that the strict requirements of the aviation industry are met at all times.

Semi-automated manufacturing process

The process begins at the input/output station, where the prepared composite parts are fed into the production process. The industrial robot picks up a clamping frame and transports it to the infrared oven for preheating. There, the part is heated to the required processing temperature of up to 450°C within two minutes. Only the respective component geometry is preheated, achieving a homogeneous temperature distribution of ±5 Kelvin across the entire surface.

The robot then removes the clamping frame with the preheated component from the oven and immediately transports it to the press, where it is precisely positioned. The entire process from removal to completion of the force build-up in the press takes less than five seconds.

Then the actual pressing process takes place, during which the composite materials are formed. This takes about one minute, after which the robot removes the part again.

Higher output thanks to double-deck heating oven

Since the infrared oven is designed with two heating stations on two levels, two clamping frames with components can always be tempered in parallel. This allows the press to be continuously loaded with preheated blanks, significantly increasing output.

After pressing, the parts are transported back to the input/output station. There, the finished components are removed from the clamping frame and prepared for the next production stage.

Wickert continues to develop the concept

"The new press technology makes it possible to form components of varying sizes efficiently and with repeatable accuracy. This not only saves time, but also guarantees consistently high product quality," emphasizes Steve Büchner, deputy marketing manager at Wickert Maschinenbau.

Wickert plans to offer a manufacturing process in the future in which manual input and output are fully automated. In addition, the machine manufacturer is currently developing a concept that allows the clamping frame with the component to be positioned in the press at a freely definable angle for certain applications.

wickert-presstech.de/en

SYENSQO TO SHOWCASE HIGH-PERFORMANCE SUSTAINABLE COMPOSITES AT JEC WORLD 2026

Innovations in aerospace and automotive composites drive manufacturing efficiency, circularity, and sustainability.

At JEC World 2026, Syensqo will demonstrate how its advanced composite technologies are accelerating high-rate manufacturing, enabling mission-critical performance, and advancing circularity across aerospace and automotive applications. By combining fast-curing prepregs, advanced material modeling, high-rate manufacturing support, sustainable resin systems, and expanded recycling ecosystems, the company continues to help customers reduce environmental impact while maintaining the highest standards of mechanical performance and industrial efficiency. These innovations reflect Syensqo's One Planet commitments, where sustainability is a core driver of long-term value creation.

From large commercial transport, space and defence applications, hydrogen-powered aircraft and eVTOL platforms to race cars and hydrogen endurance racing, Syensqo's innovations illustrate how lightweight design, structural integrity, and sustainability can progress together. Rodrigo Elizondo, President of Syensqo Composite Materials, said: "By combining advanced material science, high-rate manufacturing technologies and circular innovation, we are able to support our customers in meeting performance expectations while accelerating the transition toward more sustainable mobility. We look forward to engaging with our wide range of customers, partners, and suppliers at JEC World 2026."

Visitors are invited to meet Syensqo at Booth K58, Hall 5, and attend live presentations at the Agora 5 stage to learn about ongoing projects. In aerospace, Syensqo is supporting the industrialization of composite parts for Bell Textron using its patented DDF process with CYCOM® EP 2750 fast-cure aerospace prepregs. The company is also a key partner in the Climate Impulse hydrogen-powered aircraft project, aiming to complete the first non-stop nine-day flight around the world. Innovations extend to Vertical Aerospace eVTOL rotor blades manufactured with MTM® 45-1 materials using one-shot compression molding, eliminating secondary bonding while ensuring high-strength, lightweight performance. Further developments include high-rate production for space and defense applications, the launch of CYCOM® EP 1700 with ≤10 min takt time and automated deposition compatibility, and integration of Syensqo's composite material datasets into AniForm software for advanced forming simulation and accelerated time-to-market.

In automotive, Syensqo expands its ReGen sustainable composite portfolio with new grades MTM® 58 ReGen and SolvaLite® 714 ReGen, reducing dependency on fossil-based feedstocks while maintaining mechanical performance. Notable applications include MTM® 49-3 ReGen resin used by the Mercedes-AMG PETRONAS Formula One Team, hydrogen-powered MissionH24 endurance racing, and high-performance road car components such as the McLaren 750S active rear airbrake made with MTM® 58B and MTM® 57VQ carbon fiber prepregs.

Syensqo is also advancing sustainability through its recycling ecosystem and bio-based carbon fiber milestones. New partnerships in Asia-Pacific and Europe, including Catack-H in Korea and Fairmat in Germany, strengthen circular solutions. The company has successfully produced aerospace-grade carbon fiber from a blend of Trillium's bio-based acrylonitrile and commercial feedstocks at its Piedmont, SC research center.

Visitors can attend the following presentations at Agora 5, Hall 5:

- Tuesday 10 March: Composite Materials in a Challenging World by Jonathan Meegan (Syensqo), and Validating Automated DDF for Aerospace Applications by Rob Blackburn (Syensqo) and Vincent d'Arienzo (Bell)
- Wednesday 11 March: Portfolio Advancements for a Changing World by Edoardo Depase (Syensqo), and Climate Impulse: Pioneering Sustainable Aviation by Jef Delbroek (Syensqo)

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syensqo.com

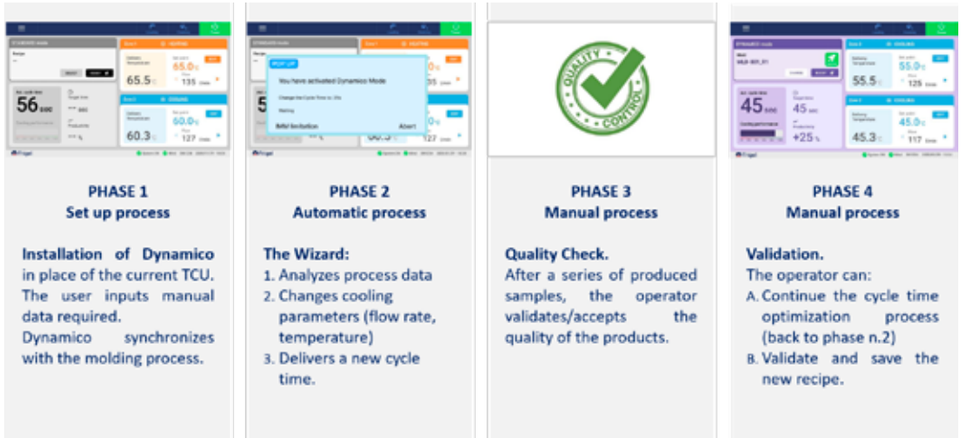
DYNAMICO™: THE UNIQUE AI-ASSISTED "MOLD PROFIT BOOSTER"

Artificial intelligence in temperature control. A new definition of profitability in injection molding thanks to reduced cooling times.

Frigel, specialized in temperature control for injection molding, presents Dynamico™. "AI-assisted" dynamic mold temperature control technology, that introduces a paradigm shift in cooling time management: the true untapped lever for increasing productivity, reducing energy costs per part and improving margins.

Dynamico is already generating important success stories in various sectors such as automotive, medical, packaging and in all specific molding applications for technical parts.

The proven results are impressive. For technical parts, simply replacing existing temperature



controllers, the cycle cooling time reduction obtained with Dynamico™ can lead to productivity increases of 20% to 50%. In polyolefin molding, installing Dynamico™ between the existing cooling system and the mold has demonstrated productivity gains of 10% to 25%.

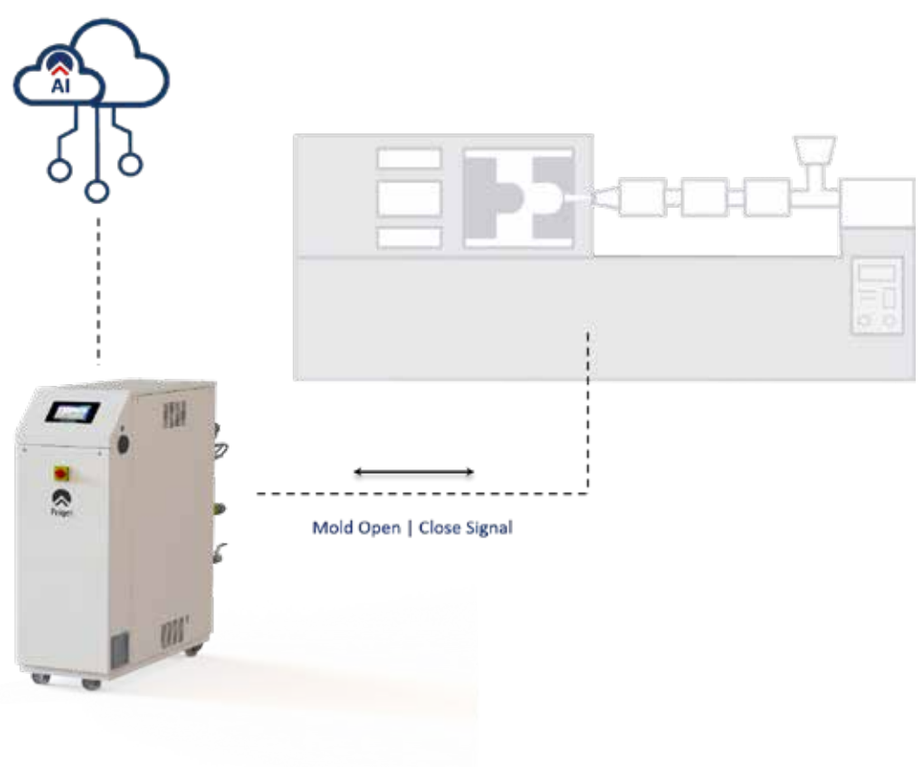
The cycle time reduction also increases the efficiency of the entire production cell thus achieving up to 15% in cost savings per unit of product.

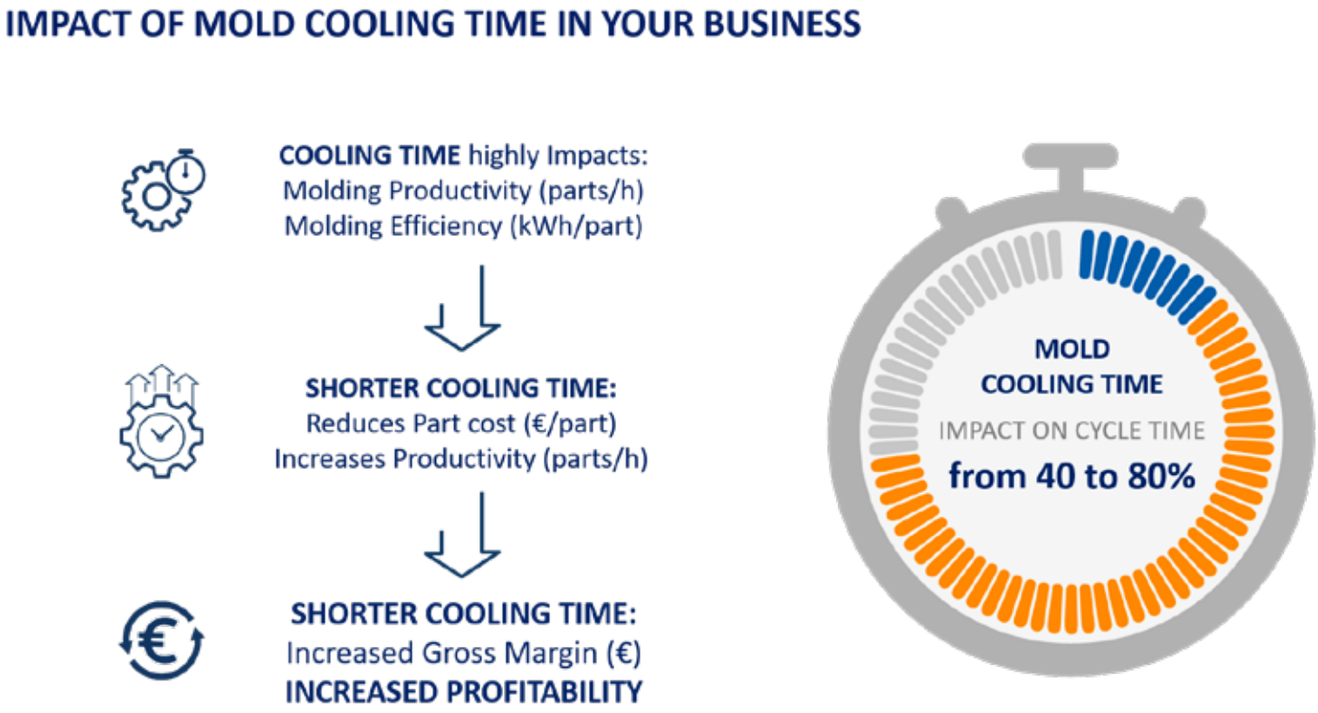
Therefore, the cycle cooling time reduction obtained by Dynamico™ offers measurable profit gains with a payback on the investment within few months. Results are easily proven in most applications, without any modification to the mould.

How Dynamico™ works

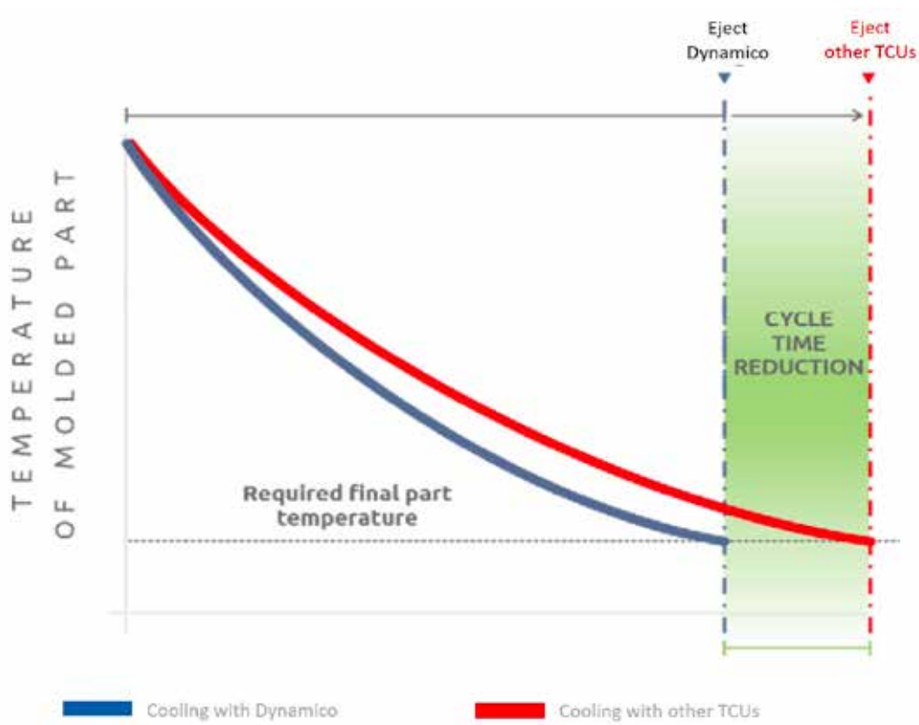
Dynamico™ is a new device that directly replaces conventional temperature controllers in any existing mold. Using advanced algorithms, according to some molding process data input by the operator, the unit interface guides him step-by-step in reducing current cooling time to the shortest possible duration that still ensures final product quality.

Basically, with this paradigm shift, the mold temperature control unit is transformed into a cycle time optimization device. In fact, the





"control variable" (set point) of the Dynamico™ is no longer the water temperature going to the mould, but "the cycle time".
Unlike traditional temperature controllers based on fixed, constant and stable temperature control, the new technology is based on a radically opposite concept: "Dynamic Mold Temperature Control". Dynamico™ can automatically and programmatically adjust mould water temperatures in each step of the cooling time optimization process - and in some cases, even regulate flow through each half of the mould using powerful inverter-driven booster pumps.
The booster pumps on board Dynamico™ range are designed to deliver up to for 500% more flow rate than conventional temperature controllers, reaching very high turbulent flow in the water channels and maximum heat transfer rate with the mould cavities, achieving unprecedented cooling performance.
The cooling time reduction is suggested by "Dynamico™ Wizard", exclusive software developed by Frigel. It uses "AI-Assisted" advanced algorithms built on Frigel's vast experience in high performance mold temperature control.
Dynamico™'s results are easy to verify, thanks to an intuitive interface that allows the operator to fine-tune the moulding process in just a few cycles, visibly confirming the significant reduction in cycle time. Once the minimum possible cooling time that guarantees product quality has been achieved, the operator can save the "mold recipe" in Dynamico™ 's memory. This allows it to be easily reapplied whenever that mold is used again.



The unique Dynamico™ user interface
Dynamico™ range may also include full internet connectivity which will allow, through AI-supported tools, the Dynamico™ Wizard algorithms to continuously learn from the process data of all connected machines and molds to the network, thus creating progressive improved performance and added value for every new mold.
The Dynamico™ product range covers all application needs in injection molding, in both packaging and technical molding, and two different versions: with or without integrated chiller.
"With Dynamico™ Frigel ushers in a new era for injection molding. An affordable, scalable, high impact on profitability technology that transforms a passive process (cooling time) into an active performance driver, redefining profitability standards in the industry", explained the company.

IDENTITY CARD

Tecnology: Optimization of cooling time in technical molding assisted by Artificial Intelligence
Model name: **DYNAMICO™**
Manufacturer: Frigel Firenze S.p.A.
Location (Headquarters): Scandicci (FI), Italy
Address: Via Pisana, 316/A – 50018 Scandicci (FI) – Italy
Website: **www.frigel.com**

Frigel's recipe: a new technology that increases profits by reducing cooling times. Guaranteed results or immediate refund of your investment.

Automotive | Medical | Tech. Molding | Householding | Cosmetics

PLASTICS RECYCLING, A GEOPOLITICAL PRIORITY IN EUROPE

Aimplas analyzes regulatory and technological challenges at Plasrec: more than 20 presentations addressed the challenges of plastics recycling and showcased the latest technological advances.

European plastics recycling faces mounting regulatory pressure and economic strain as new EU rules approach. More than 100 industry professionals gathered in Valencia on December 10–11 for the third International Plastics Recycling Seminar (Plasrec), organized by Aimplas, to assess whether the sector is prepared for tighter legislation, rising costs, and growing competition from virgin and imported materials. Across two days of debate, speakers warned that without faster implementation, fairer market conditions, and greater availability of high-quality recycled plastics, Europe risks missing its circular economy targets for 2030.

A central theme of the seminar was the growing gap between regulatory ambition and industrial reality. Representatives from recycling and plastics associations described an unprecedented acceleration of EU legislation, driven by geopolitical concerns and the push for strategic autonomy. New requirements linked to the Packaging and Packaging Waste Regulation (PPWR), recycled content mandates, and stricter traceability rules are expected to reshape the market over the next three years.

Industry groups warned that this regulatory shift is taking place while the sector is already under pressure. European plastics production has declined sharply since 2018, thousands of companies have closed in recent years, and tens of thousands of jobs have been lost. At the same time, recyclers face competition from low-cost imports of recycled materials and from virgin plastics, whose prices remain difficult to match under current energy and operating costs.

Several speakers described the situation as a "regulatory tsunami," arguing that while recycling capacity exists, economic conditions are undermining its viability. According to industry estimates, Europe's recycling capacity is close to 13 million tonnes, but stagnation and plant closures now put the EU's 2030 recycling targets at risk. Calls were made for stronger market surveillance, fairer competition rules, and measures to reduce energy costs in order to prevent further loss of capacity.

Packaging was identified as one of the most critical areas of change. From 2026 onwards, all packaging placed on the EU market will need to be recyclable according to harmonised criteria, while mandatory recycled content targets and labelling requirements will follow. Speakers stressed that "design for recycling" will no longer be voluntary but a legal obligation, with direct consequences for producers, converters, and recyclers alike. Concerns were also raised about the availability of suitable recycled materials to meet future demand, particularly for food-contact applications.

Technology was widely presented as part of the solution, though not a silver bullet. Advances in sorting and pre-treatment, including the use of artificial intelligence and computer vision, are improving efficiency and enabling the recovery of waste streams previously considered too complex or uneconomical. However, high investment costs and data quality issues remain barriers to widespread deployment.

Mechanical and chemical recycling technologies were discussed as complementary approaches rather than competing ones. While mechanical recycling remains the backbone of the system, chemical recycling is increasingly seen as a necessary option for multilayer, contaminated, or hard-to-recycle plastics. Speakers highlighted progress in pyrolysis, depolymerisation, and enzymatic processes, while also acknowledging that many projects are still at pilot or first-of-a-kind industrial scale.

Several interventions underlined that technology is advancing faster than regulation and markets can absorb it. Without clear rules, stable demand for recycled materials, and faster permitting procedures, many innovations risk failing to reach commercial scale. Industry representatives repeatedly called for regulatory certainty and coherent implementation across member states.

The seminar concluded with a broader discussion on meeting recycling targets in demanding sectors such as textiles, automotive, electrical and electronic equipment, and renewable energy. Participants highlighted persistent quality requirements and technical barriers, particularly in automotive applications, where discussions are already underway to revise recycled content targets.

aimplas.net

SYMPLAST LAUNCHES SYMFLEX TPE/TPV COMPOUNDS

The Turkish compounder introduces a new generation of TPE/TPV materials designed to enhance processing efficiency, durability and sustainability across multiple industries.

Symplast, a Turkey-based producer of TPE compounds founded in 2013, is expanding its international footprint by strengthening its European operations through a dedicated service hub for the DACH region in Essen, Germany. Operating from an integrated R&D and manufacturing site in Izmir, the company supplies materials for sectors ranging from automotive to construction while developing both standard and custom formulations in its in-house laboratories.

"At Symplast, innovation is not an added value: it is the foundation of how we operate. Every compound we develop is shaped by a commitment to technical excellence, customer collaboration, and continuous improvement", explained Tolga Sarıkahya, CEO and co-owner of Symplast

Symplast's product portfolio focuses on high-performance thermoplastic elastomer compounds under the established Symflex® brand, encompassing EPDM/PP-based TPV compounds, SEBS- and SBS-based TPE compounds, and EPR/PP-based TPO compounds. These materials are engineered for balanced mechanical properties, excellent processability, and long-term durability, supporting manufacturing methods such as injection molding, extrusion, blow molding, and overmolding.

A defining strength of Symplast lies in its dual approach: offering a broad selection of proven, industry-standard compounds while also developing tailor-made formulations. In the company's in-house research and product development laboratory, polymer experts and application engineers work closely with customers to create materials with precisely defined characteristics, whether improved weathering or chemical resistance, customized haptics, special color requirements, or enhanced flexibility and mechanical performance. Symplast's ability to rapidly adapt formulations ensures swift responses to evolving market and application needs.

"Our goal is simple: to understand our customers' challenges and turn them into solutions. Whether through standard products or tailor-made compounds, we strive to be a reliable, agile partner in every project", said Ali Rıza Kır, CFO and co-owner of Symplast.

Today, Symflex® compounds are found across industries such as construction, automotive, consumer goods, electronics, medical and care applications, and impact modification. Customers value their durability, aesthetics, and performance consistency, attributes that are essential in environments where reliability and precision matter.

Sustainability is another core pillar of Symplast's philosophy. The company develops durable, fully recyclable compounds designed for long service life and efficient end-of-life handling. Increasing reliance on solar energy at its production facility helps significantly reduce the carbon footprint of manufacturing. Continuous process optimization and responsible material selection further support environmentally conscious production. Equally important is the company's emphasis on people: ongoing qualification programs, skills development, and a collaborative work culture help maintain deep technical knowledge and consistently high product quality.

Combining its integrated production capabilities in Izmir with regional support in Essen and strategic coordination through its Istanbul office, Symplast offers both engineering depth and customer proximity.

symplast.com.tr

“PLASTIC CIRCULARITY IS AN UNSTOPPABLE REALITY ALREADY UNDERWAY”

We sat down with Bernd Roegele, president of the Equiplast 2026 Organizing Committee, to discuss the vision behind the next edition.

The plastics sector is undergoing a profound transformation driven by regulatory pressure, the commitment to a circular economy, and the digitalization of processes. In this context, Bernd Roegele, President of the Organizing Committee of Equiplast 2026, analyzes the current state of an industry moving toward more sustainable, collaborative, and technologically advanced models. All of this will be showcased at Equiplast, the leading trade fair for the Spanish sector, which will take place from June 2 to 5 at Fira de Barcelona’s Gran Via venue.

How would you describe the current situation in the plastics industry?

We are living through a period of change. Plastics are under strong regulatory and social pressure, but they also represent an open field for innovation. Our industry understands that its future depends on designing more sustainable materials and processes, investing in the circular economy, and communicating the value of plastics as a material essential for manufacturing countless products. What’s interesting is that the transition is already underway: today we see circular solutions that seemed impossible a decade ago.

What progress would you highlight in terms of circularity?

The growing incorporation of recycled plastics into new products demonstrates a real commitment to the circular economy, which is here to stay. At the same time, mechanical and chemical recycling technologies have been developed that allow complex plastics to be recovered with high quality, making it easier to reuse them in value-added applications. Added to this is a strong focus on eco-design – products conceived from the outset to be easy to recycle and reuse – and the promotion of bio-based, biodegradable, or compostable materials, which reduce dependence on fossil raw materials and help lower the sector’s carbon footprint.

What structural challenges does the plastics industry face today?

There are major challenges: technological innovation must remain constant; there is an urgent need to attract young, qualified talent; and the social perception of plastics is still largely negative. On top of that comes efficient raw material management and adaptation to an increasingly demanding regulatory environment. But above all, the biggest challenge is collaboration: no company can tackle the transformation toward sustainability alone. That’s why trade fairs like Equiplast play a key role, providing a space to connect, cooperate, and put solutions into practice.

What role does digitalization play in this green transition?

It is absolutely crucial. Digitalization makes it possible to control and automate all processes for producing, transforming, and recycling plastics, minimize energy consumption, improve traceability, reduce errors, and ensure quality

and proper use of recycled materials. Thanks to these tools, factories can be more efficient and productive, in other words, produce "made-to-order" plastics that are sustainable and aligned with real demand.

Do you think the social perception of plastics is changing?
Plastics have been unfairly demonized. And we have a lot of work to do to change that perception. For years, the debate has focused on waste, not on possibilities. Our role as an industry must be to demonstrate with facts that plastics are not the enemy, but a material with a life cycle that, when properly managed, can deliver great value. As I said earlier, the key lies in the circular economy: designing recyclable products, promoting reuse, and investing in mechanical and chemical recycling technologies. In Spain, recycling figures are already significant, showing that the sector is committed. Equiplast will be an opportunity to show that plastics are part of the solution, not the problem.

How is the Spanish plastics industry adapting to new European regulatory requirements, especially regarding recycled plastics and microplastics?
The industry is in an advanced stage of adaptation and has the technology to comply with increasingly strict regulations. It's a process being carried out responsibly, although not all companies move at the same pace and not all value chains yet have sufficient volumes of traceable recycled material. For recycled plastics, the challenge is scaling up while ensuring quality and traceability; for microplastics, closing operational and control gaps throughout the logistics chain to prevent losses. It's a process that requires significant effort, but it positions the Spanish plastics industry very well to become more sustainable.

What role does Equiplast play in this context of change?
Equiplast is the meeting point where this entire innovation ecosystem comes to life. At the 2026 edition, we want to present a complete picture of where the plastics industry is heading: more circular, more digital, and more interconnected. We want participating companies and professionals not only to see innovative technologies and materials but also models of collaboration and real commitment to sustainability.

What can we expect from the next edition of the trade fair?
Equiplast has been strengthened: it will feature more than 400 exhibiting companies – a 12% increase compared to 2023 – and nearly one-third will come from abroad, reinforcing its international character. In addition, we've redesigned spaces for activities with a practical focus: round tables, showcases of sustainable solutions, and technical conferences, all aimed at driving real innovation and applied knowledge.

How is the "Rethinking Plastics" initiative evolving for Equiplast 2026?
It will be consolidated as an open space for

knowledge and debate. We want to show, with facts, that plastics can have multiple lives. There will be a showroom of products made with sustainable plastics, from which we'll select the winners of the "Rethinking Plastics" awards. And as a new feature, we're introducing a program of conferences on best practices and innovative projects in the sector, among other topics of interest to industry professionals.

Looking ahead, how do you envision the plastics industry in the next decade?
It will be a regenerative industry, where every piece of waste becomes raw material. Innovation will remain the driving force: smart materials, chemical and physical recycling, and processes with a neutral carbon footprint. But there will be another equally important factor: collaboration between companies, technology centers, and public administrations. The future of plastics depends not only on technology but also on a shared vision of sustainability among all stakeholders.

What message would you like to send to professionals in the sector?
Plastics have a future, and that future will be sustainable or it won't exist. We have both the responsibility and the opportunity to transform their role in industry and society. Equiplast aims to be the space where this transformation becomes visible, where the plastics industry proves it can be a driver of solutions, not part of the problem.

equiplast.com

CHINAPLAS 2026: QUALITY GROWTH AND THRIVING FUTURE POWERED BY GREEN SOLUTIONS

From April 21 to 24, Shanghai hosts the leading international plastics and rubber fair, showcasing new materials, smart manufacturing, and green solutions.

In April, the National Exhibition and Convention Center (NECC) in Hongqiao, Shanghai, will host CHINAPLAS 2026, the premier international trade fair for plastics and rubber. Spanning over 390,000 square meters across 16 exhibition halls and featuring more than 4,600 exhibitors from around the world, the event will showcase the latest innovations in new materials, smart technologies, and sustainable solutions, guiding the industry from "Made in China" to "Innovated in China."

New materials and advanced applications

CHINAPLAS 2026 will put a spotlight on material innovation, addressing the needs of emerging sectors such as electric vehicles, humanoid robotics, aerospace, wind energy, and photovoltaics. Modified plastics and thermoplastic elastomers enhance strength and electrical conductivity, while high-performance engineering plastics ensure durability and resilience under extreme conditions. Lightweight, durable composites are becoming essential for humanoid robots and low-altitude economy applications.

Smart manufacturing: Industry gets intelligent

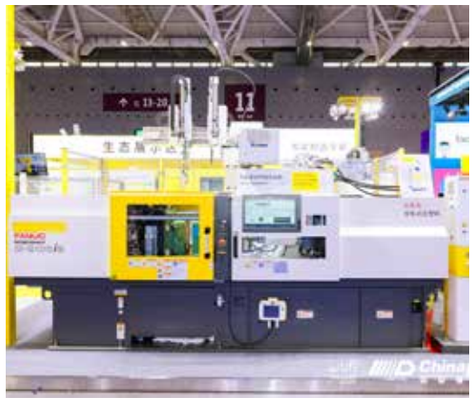
Artificial intelligence and automation technologies are transforming plastics and rubber production. CHINAPLAS 2026 will feature automated production lines, IoT-enabled digital systems, and intelligent quality-control platforms, enabling companies to optimize processes and costs while evolving from basic automation to full smart manufacturing.

Green transformation: Moving towards "dual carbon" goals

Sustainability is at the heart of the event. Solutions for emissions reduction, advanced recycling, and the use of bio-based, biodegradable, or eco-friendly materials will be presented, turning waste into resources and opening new markets for green products.

Quality growth and international participation

In addition to its record exhibition space, CHINAPLAS 2026 will host a high level of international exhibitors, including more than 1,400 "Shining Niche" companies recognized by the Chinese government for innovation and excellence. A series of side events with industry experts will foster knowledge exchange, networking, and qualitative sector development.



A global platform for buyers and companies

CHINAPLAS continues to serve as a global hub for the plastics and rubber trade, attracting buyers from around the world and integrating online and offline channels through digital tools like CPS+ and eMarketplace to facilitate business contacts and opportunities. In a context of global uncertainties, the event highlights the competitiveness of Chinese companies in innovation, smart technologies, and sustainable materials. Pre-registration is now open, with an entrance ticket priced at USD 7.50.

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FAKUMA 2026: INDUSTRY HIGHLIGHT WITH STRONG USER BENEFITS AND UNIQUE SPIRIT

From 12 to 16 October 2026, Fakuma returns to Friedrichshafen to celebrate its 30th anniversary, reaffirming its role as one of Europe's leading trade fairs for plastics processing. Founded in 1981, it has grown into an international hub focused on innovation, sustainability, and practical solutions to meet the industry's future challenges.

From 12 to 16 October 2026, Friedrichshafen on Lake Constance will once again become the beating heart of the plastics processing industry. Fakuma, the international trade fair for plastics processing, will celebrate its 30th anniversary with a five-day event set to bring together exhibitors and trade professionals from across the globe.

What started in 1981 with just 76 exhibitors has grown into one of Europe's leading platforms for plastics processing. Over three decades, Fakuma has established itself as a key meeting point for machine manufacturers, processors and technology providers, consistently combining strong international participation with a distinctly practical, application-oriented focus.

"Fakuma has evolved into a significant European platform for plastics processing", says Dr. Christoph Schumacher, Vice President Global Marketing at Arburg, a long-standing exhibitor at the show. He describes the fair as a "heartfelt passion" and highlights its ideal location and strong emphasis on real-world industrial solutions.

According to Dr. Friedrich Kastner, CEO of the Next Generation Analytics Group (NGA) and member of the exhibition advisory board, Fakuma's success lies in its ability to reflect an industry in constant transformation. "Today, the show is one of Europe's most important plastics events – not only as a technology marketplace, but as a source of inspiration for a sustainable, energy-efficient and digitally connected plastics industry."

Over the years, the sector's priorities have shifted from linear value creation models to a circular economy approach. Energy efficiency, digitalisation, advanced recycling technologies, the public perception of plastics and the shortage of skilled workers now dominate the agenda – challenges that Fakuma aims to address by showcasing practical solutions and systemic strategies for greater sustainability.

The entire spectrum of plastics processing is covered

Fakuma is no longer just an injection moulding trade fair, but rather a leading extrusion and recycling platform as well, that covers the entire spectrum of plastics processing. Industry players praise the special user benefits as well as the unique spirit of this practical trade fair with its lively atmosphere. "Fakuma is a special place for us: people meet here on equal terms, partnerships are forged and decisions are formulated that shape production strategies for years to come. Its informal atmosphere brings out the unique spirit of Fakuma", adds Christopher Vitz, regional president for Central Europe at Engel. Fakuma has always been an important European platform for the company: a place where plastics processing is not only showcased, but rather advanced collectively as well.

Expert Visitors Value the User-Oriented, Friendly Atmosphere

Especially in economically challenging times, the industry meet is becoming increasingly important. Due to the fact that investment decisions are being considered more carefully than ever before, companies are seeking precisely tailored applications and value the opportunity of making comparisons at trade fairs like Fakuma, which focus on a direct exchange of information and personal networking. "Fakuma is about practical applications. Discussion takes place here on an equal footing. Numerous projects and developments are initiated in Friedrichshafen," states Michael Wittmann, managing director of the Wittmann Group. "Fakuma has built up strong global momentum with this spirit, while retaining its local character and relaxed atmosphere. We have customers in Brazil who travel to Lake Constance to attend every Fakuma trade fair, because they value the combination of technological innovations and the relaxed atmosphere that provides space for in-depth discussions".

The entire world of plastics in five days

The 30th Fakuma will take place from Monday the 12th through Friday the 16th of October, 2026, from 9:00 a.m. to 5:00 p.m. each day, once again transforming the Friedrichshafen Exhibition Centre into the home of a major family celebration. The trade fair highlight is regarded as a showroom presenting the entire world of plastics – from injection moulding, forming and extrusion technology, as well as 3D printing, masterbatches and raw materials, right on up to tools, process technology and recycling. Whether raw materials, processing machines, peripherals or automation solutions are involved, the portfolio of topics supports the plastic processing industry in meeting today's and tomorrow's challenges and remaining economically successful on the market. The autumn event will be accompanied by an attractive and exciting supplementary programme on all five trade fair days – with world-class expert presentations as part of the forum and the third edition of the round-table discussion, as well as Career Friday for young professionals.

"We're very pleased with the great interest expressed in the anniversary edition of Fakuma," says Bettina Schall, managing director of trade fair promoters P. E. Schall. "We will, of course, reflect on how it all began 45 years ago. But above all, we want to look to the future and focus on new solutions that will empower the industry to master current and future challenges. Fakuma is traditionally a trade fair where performance and expertise are showcased. Consequently, we can expect to see stimulating, pioneering initiatives – from technological, ecological and economic perspectives.

fakuma-messe.de

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www.samuexpo.com

Solids Parma
11-12 February 2026
Parma, Italy
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www.solids-parma.de

Mecspe
4-6 March 2026
Bologna, Italy
Technology without limits: the largest event dedicated to innovations for the manufacturing industry.
www.mecspe.com

JEC World
10-12 March 2026
Paris, France
The leading international composites show
www.jec-world.events

Chinaplas
21-24 April 2026
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One of the most prestigious international plastics and rubber trade fairs
www.chinaplasonline.com

PRSE, Plastics Recycling Show Europe
5-6 May 2026
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The pan-European exhibition and conference dedicated to plastics recycling
www.prseventeurope.com

Interpack
7-13 May 2026
Düsseldorf, Germania
International trade fair for packaging machines and appliances, packaging materials, packaging means, packaging aids, confectionery machines and plants
www.interpack.com

SPS Italia
26-28 May 2026
Parma, Italy
The highlight event for the intelligent, digital and sustainable industry: a reference point for the Italian manufacturing sector
www.spsitalia.it

Interplas
2-4 June 2026
Birmingham, UK
The event for product designers, engineers, manufacturers and buyers looking to find the latest plastics technology and materials.
www.interplasuk.com

FIP France Innovation Plasturgie
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