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SIPA

SIPA SPEAKS

2026

EDITORIAL

ENGINEERING RESILIENCE: A Global Vision for the Future of PET

In a global landscape increasingly defined by energy uncertainty and fluctuating resource costs, the beverage and packaging industry is facing a period of significant transformation.

At SIPA, we believe the most profitable kilowatt-hour is the one you never consume. This principle is the heartbeat of our 2026 strategy. As high power costs challenge operational survival, SIPA stands at the frontline, embedding sustainability into the DNA of every machine we build to ensure our partners maintain a competitive edge through sheer efficiency.

Our **SUSTAINABILITY** section highlights, infact, how we decouple industrial growth from carbon footprints. From the **XFORM** preform platform, which achieves energy consumption as low as **190-Wh/kg** via kinetic recovery , to the **ECS SP** series that reduces actual power consumption to just 25-35% of its rated power, we are redefining resource circularity. Our integrated syncronized systems for blowing & filling and for blowing, labelling and filling accomplish the mission of eliminating energy-draining air conveyors and drastically reducing water waste.

Our **AROUND THE GLOBE** feature celebrates the diverse manufacturers who have partnered with SIPA to thrive in fast-paced markets. From Europe and the Middle East to Africa, Asia, and the Americas, SIPA technology is empowering industry leaders to master high-volume production while achieving ambitious circular economy goals. Whether it is implementing pioneering lightweight neck finishes, commissioning high-speed lines with unmatched purity, or doubling down on specialized medical and home care packaging, our collaborative success spans every continent.

Inside our **TECHNICAL WINDOW**, we explore the advancements driving the industry forward. A major highlight is the **XFORM Renew**, our evolution of direct flake-to-preform technology. By bypassing the pelletizing stage, this system offers a single thermal history for the polymer, reducing CO_{-2} emissions by 80% compared to virgin PET and lowering the Total Cost of Ownership by up to **35%**. We also dive into the **XTRA COMPACT**, the “Small Giant” of high-speed blowing, which delivers **90,000 bph** within the footprint of a traditional 20-cavity machine. To ensure these machines perform at their peak, our patent-pending **Process Wizard** software acts as a digital assistant, reducing human error and making high-level process management accessible to all operators.

This issue’s primary focus is the completion of the high-speed PET journey through revolutionary secondary packaging. The new **Genius PTF PRO** palletizer is engineered to master the “overspeed” required at the finish line to prevent bottlenecks. Designed to support our **90,000 bph Sincro Tribloc** lines, it achieves a consistent **8.5 layers per minute** with **99% efficiency**. This low-level infeed solution ensures that even the most lightweight containers are handled with surgical precision and gentleness.

Finally, our **PETWORK** section unveils the **SIPA Additive** service, offering fast 3D prototyping to compress time-to-market and allow for rapid physical iterations. We also introduce a new industry standard: the **0.9g 25/22 ultra-light neck finish**. By saving precious PET resin while remaining tethered-cap ready, this innovation helps our customers future-proof their production lines against evolving environmental regulations.

At SIPA, we don’t just build machines; we engineer the “Short-Cut” to a more profitable and sustainable future. Join us as we navigate the future, one saved kilowatt at a time.

01 - News from

AROUND the GLOBE

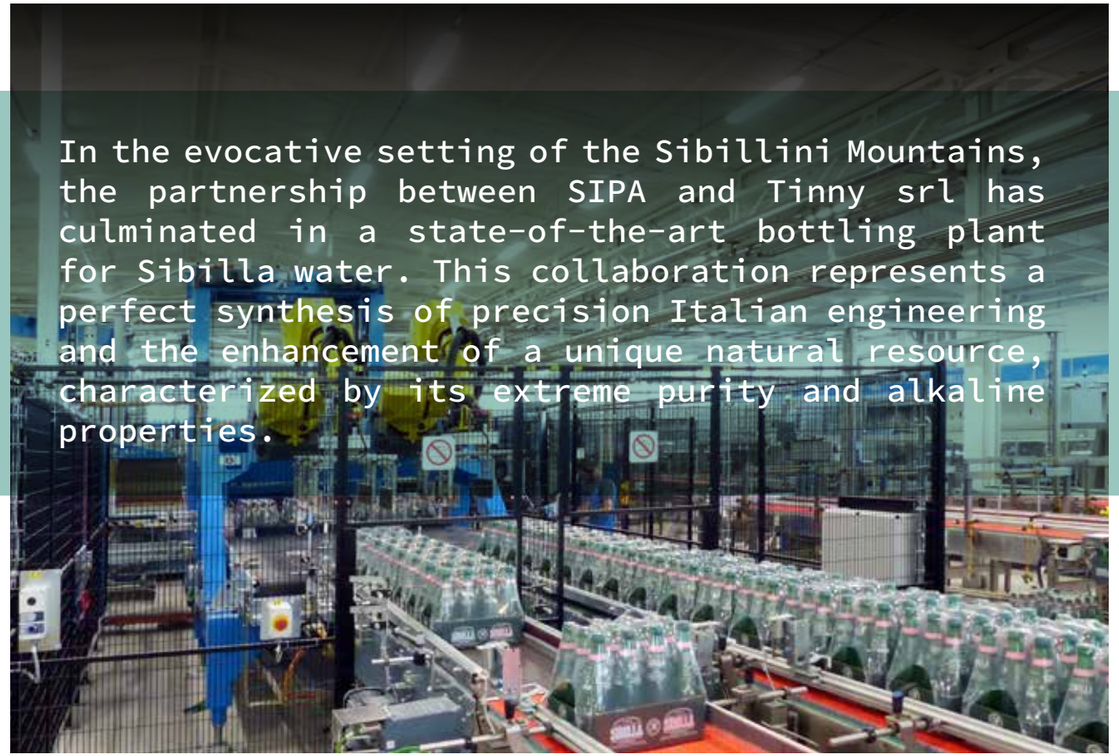
the different

continents.

ITALY

Technological excellence and pureness: the new SIPA line for Tinny srl at the Sibilla

In the evocative setting of the Sibillini Mountains, the partnership between SIPA and Tinny srl has culminated in a state-of-the-art bottling plant for Sibilla water. This collaboration represents a perfect synthesis of precision Italian engineering and the enhancement of a unique natural resource, characterized by its extreme purity and alkaline properties.



SORGENTE SIBILLA ITALIAN SPRING WATER

Packaging Design: harmony between form and function

The project began at the SIPA Design Department, where packaging was developed for 0.5L, 0.75L, and 1.0L PET formats in the 2 different bottle geometrical shapes. The objective was twofold: to create a **premium aesthetic** reflecting the Sibilla brand identity and to optimize the bottle structure for **lightweighting**. This approach reduced the container's environmental footprint without compromising the mechanical resistance required to sustain high-speed production.

The Heart of Production: The 48,000 bph Sincro Bloc

The technological centerpiece of the installation is the Sincro Bloc integrated system, designed to handle an output of 48,000 bottles per hour (bph) for the 0.5L format. This configuration optimizes efficiency and ensures rigorous hygienic standards by eliminating air conveyors between the blowing and filling stages.

The process begins with the XTRA 20 Rotary Blower, a 20-cavity powerhouse that redefines high-speed PET production through its "open" architecture, which allows for unparalleled accessibility and rapid mold changeovers. Beyond its high output, the XTRA 20 features a market-leading wide processing window and an optimized oven ventilation system that reduces energy consumption by up to 25%. When combined with the ARS PLUS high-efficiency air recovery system and UV decontamination lamps on the preform chute, the machine ensures that maximum productivity is achieved with the smallest possible environmental and energy footprint.

The line then flows into the **FLEXTRONIC-C 100-20 Filling-Capping Block**, a unit featuring 100 filling valves and 20 capping heads. The system operates within a sterile air overpressure isolator (**ISO Class 7**), a critical solution for preserving the natural characteristics of Sibilla water without the use of preservatives.

Technology and Total Quality Control

Beyond the main block, the SIPA line integrated for Tinny srl features advanced solutions for every process phase:

- **Preparation and Treatment**: Includes the **Massblend 42** mixing and carbonation unit and a pasteurizer with a capacity of up to 36,000 l/h for specific product management.
- **Safety and Hygiene**: A **pulsed light unit** sterilizes the caps, while the **700 Series control system** uses cameras to monitor capping quality and fill levels, automatically rejecting non-compliant products.
- **Labeling and Coding**: The **Flexi Opera 400 36T** manages label application via modular units, followed by a **30W laser coder** for indelible and precise traceability.

End-of-Line and Palletization

The management of the finished product is handled by a high-performance end-of-line system. The **Genius PTF-V Fastlayer** palletizer organizes packs on Euro pallets at high speeds, while the **SPF-A stretch wrapper** with a high-speed kit ensures load stability for transport.

A Strategic Collaboration

SIPA's "turnkey" solution allows Tinny srl to operate with unprecedented flexibility at the Sibilla spring. From container design to the realization of a complete 48,000 bph line, SIPA confirms its role as the ideal technological partner for those aiming to combine industrial volumes, sustainability, and maximum product quality protection.

ITALY

Precision in Production: SIPA and Fattore Plast Partner for Excellence

FATTOREPLAST

Based in the industrial heart of Padua, Italy, Fattore Plast has built a reputation as a comprehensive partner in the plastics industry. While their expertise spans from mold construction to injection molding, it is their plastic blowing division that has recently seen a significant leap in capability through a strategic partnership with SIPA.

A Growing Partnership

Fattore Plast's relationship with SIPA reached a milestone few years ago with the installation of one **ECS SP 80 single-stage system**. Following the success and reliability of this first installation, the company recently doubled down on SIPA technology by adding an **SFL Flex linear blowing machine**.

The choice of the SFL Flex was driven by the specific needs of a converter: it offers extreme flexibility and rapid format changeovers, allowing Fattore Plast to pivot between different production runs with minimal downtime.

Targeting High-Value Markets

SIPA's technology is currently powering two of Fattore Plast's most demanding production lines:

- **Medical & Pharmaceutical**: The **ECS SP 80** single-stage system is dedicated to the production of containers for the medical and pharmaceutical sectors. In an industry where hygiene and precision are non-negotiable, Fattore Plast operates in overpressure environments with ISO 8 cleanroom packaging capabilities. The ECS SP 80's ability to produce high-quality containers from resin to finished bottle in one seamless process ensures the airborne contaminant control required for these high standards.
- **Home Care & Detergents**: To meet the demands of this expanding market, the **SFL Flex** offers the versatility needed for sophisticated container designs. It effectively balances complex structural requirements with the high-end aesthetics essential for home care branding.

Integrated Expertise

While blowing is at the heart of this collaboration, it is supported by Fattore Plast's "all-in-one" approach. The company assists clients from the initial co-design and mold engineering phases to the final customization of the product. This integrated flow—combined with SIPA's blowing technology—allows them to process a wide range of materials, including PET, PP, and increasingly, RPET and Circular Life plastics (PSV).

By integrating SIPA's high-performance blowing systems into their 24/7 production cycle, Fattore Plast continues to solidify its position as a leading converter, capable of delivering specialized, high-volume solutions for the food, medical, and chemical industries.

UKRAINE

SIPA & POLY-TRADE: Leading PET Innovation in Ukraine

ПОЛИТРЕЙД
УКРАИНА

We recently sat down with Ilya Tatarinov, General Manager of POLY-TRADE, a leading Ukrainian preform converter. Founded in 2016, POLY-TRADE has rapidly grown into one of Ukraine's most progressive producers, with a capacity exceeding 6 million bottles per month.

Based in an increasingly fragmented and fast-paced market, POLY-TRADE has established itself as a resilient and forward-thinking manufacturer. By operating two SIPA Xform 160 systems and managing over 12 different preform formats, they have successfully combined high-volume efficiency with the flexibility needed to serve a wide range of beverage SKUs.

Today, POLY-TRADE is at the forefront of a major market shift, being the first in the region to successfully implement the 1810 Lightweight neck finish–a solution that offers significant resin savings without requiring costly bottling line conversions for their customers.

1. How has the Xform 160 helped you manage such a high variety of SKUs and small production runs effectively?

The SIPA Xform 160 has been a key enabler for handling our diversified portfolio of 12 SKUs across just two machines.

Its fast mold changeover time and high process stability allow us to switch between formats with minimal downtime. This is critical for us, as we operate in a market where flexibility and responsiveness are more important than just volume.

Additionally, the machine's repeatability ensures consistent quality even in shorter production runs, which significantly reduces material waste and start-up losses.

2. What was the deciding factor in switching to the SIPA Xform 160, and has it delivered on cycle times?

The main deciding factors were reliability, flexibility, and energy efficiency.

Previously, we worked with other suppliers, but the SIPA Xform 160 offered a better balance between cycle time performance and operational stability.

In real production conditions, the machine has met — and in some cases exceeded — the promised cycle times. More importantly, it maintains these cycle times consistently without compromising quality, which is something we did not always experience before.

3. Why stay with PCO1810 instead of switching to lighter alternatives like PCO1881 or GME30.40?

While newer neck finishes like PCO1881 and GME30.40 offer higher lightweighting potential, the decision is not purely about weight reduction.

For many of our customers, compatibility with existing filling lines, capping equipment, and closures remains a decisive factor.

PCO1810 is still a highly standardized and widely adopted solution, especially in regional markets where CAPEX optimization is critical.

The introduction of 1810 Lightweight (LW) allows us to deliver material savings while preserving full compatibility — offering the best of both worlds.

4. Any compromise in bottle performance or cap compatibility with the lightweight version?

No, we have not observed any negative impact on bottle performance.

The lightweight preforms have been carefully engineered to maintain top-load strength, pressure resistance, and sealing integrity.

Cap compatibility has also remained fully consistent with standard PCO1810 closures, which was essential for our customers.

This ensures a seamless transition without requiring changes in downstream operations.

5. How critical was SIPA's local technical support in your decision?

It was a very important factor, especially in the current regional context.

Having access to SIPA's local technicians ensured a smooth installation, faster commissioning, and ongoing operational support.

In a market where downtime can have a significant financial impact, reliable local service is not optional — it is a necessity.

6. How will you use the first-mover advantage with 1810 LW?

Being the first in the region to adopt 1810 Lightweight gives us a clear competitive edge.

We plan to leverage this advantage in three ways:

- Cost leadership — lower resin consumption allows us to offer more competitive pricing
- Sustainability positioning — reduced plastic usage aligns with growing environmental expectations
- Customer acquisition — offering a drop-in lightweight solution without requiring line modifications is very attractive for converters and bottlers.

This positions us as an innovative and forward-thinking supplier, helping us gain market share from competitors still using standard 1810 solutions.

SOUTH AFRICA

SIPA & Super Bev: when precision meets performance

At the close of 2025, the South African packaging and beverage market witnessed a technological leap with the arrival of the first SIPA Xlabl RF units. These state-of-the-art roll-fed labellers were strategically acquired by two industry players: SuperBev Pty Ltd, a major beverage producer, and a prominent converter based in Johannesburg.

Both companies sought a solution that could keep pace with South Africa’s dynamic market demands, specifically requiring high flexibility and industry-leading “bottle-to-bottle” changeover speeds.

The Customer: a leader in production and innovation

SuperBev Pty Ltd SuperBev is a key force in the South African beverage landscape, operating out of Gauteng. Their portfolio spans a wide array of products, from soft drinks and flavored waters to energy drinks. With a high-volume production environment, SuperBev required a labelling system that could minimize downtime during flavor or brand switches, ensuring their filling lines remain at peak productivity.

Xlabl RF: defining the new standard

The Xlabl RF is SIPA's innovative rotary roll-fed labeller, engineered to apply plastic wrap-around labels using hot-melt glue to both cylindrical and shaped PET bottles. Whether handling full or empty containers, the machine provides a "game-changer" experience in efficiency and reliability.

Key Technical Highlights:

- **Performance**: Capable of speeds up to 90,000 bph with an industry-leading scrap rate of just 0.04%.
- **Patented Cutting System**: Designed for longevity, the system is guaranteed for over 200 million cuts without requiring manual blade adjustments.
- **Tool-less Changeover**: Features a sliding labelling station that allows for a complete bottle-to-bottle changeover in **just 15 minutes**, providing the extreme versatility needed for modern production.
- **Extreme Versatility**: Effortlessly manages label thicknesses under 20µ and adapts to complex bottle geometries.
- **Smart Interface**: A high-resolution 21.5" touchscreen provides an intuitive, web-based HMI for streamlined operator workflows and real-time monitoring.

Local presence, global excellence

SIPA's success in the region is rooted in its long-term commitment to the African market. Present in South Africa since 2013, SIPA has established a robust Sales and After Sales office in Johannesburg.

To support the growing fleet of Xlabl machines and other PET solutions, SIPA continues to expand its local team of technical engineers. This ensures a fast, "boots-on-the-ground" approach to after-sales service, providing customers like **SuperBev Pty Ltd** with the peace of mind that expert support is always just a phone call away.

MEXICO

Precision at Scale: Mega Empack's Multi-System Integration with SIPA

mega empack

In the rapidly evolving landscape of the beverage and packaging industry, the alliance between Mega Empack and SIPA stands as a benchmark for innovation.

By combining Mexican industrial excellence with Italian engineering precision, these two leaders are delivering high-performance, sustainable solutions to some of the world's most demanding brands.

Mega Empack: A Titan of Mexican Packaging

Mega Empack is not just a supplier; it is a critical industrial pillar within the Bepensa Group, one of Mexico's most influential business conglomerates. With over 30 years of experience, Mega Empack has established itself as a leader in the design and manufacture of PET containers, preforms, and closures.

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The company's magnitude is reflected in its vast operational footprint:

Geographic Reach: From its strategic locations in Mexico, the company serves a massive **market including the United States, Belize, Guatemala, El Salvador, and Nicaragua**.

Quality Benchmarks: Their operations meet the highest global benchmarks, holding full international certifications for food safety, quality management, environmental impact, and workplace safety.

Key Partners: As a primary partner for a leading regional beverage bottler—the second-largest Coca-Cola bottler in Latin America—Mega Empack's production lines must meet the highest global standards for speed, safety, and durability. SIPA's Technological Footprint:

Reliability at Scale

To support this level of industrial demand, Mega Empack has consistently turned to SIPA for its core transformation technology.

The collaboration is highlighted by a significant fleet of SIPA equipment:

XFORM Preform Systems: Mega Empack has integrated multiple XFORM systems for high-volume preform production. These systems are renowned for their low energy consumption, their acceptance of legacy molds and ability to handle high percentages of recycled PET (rPET), aligning with Mega Empack's sustainability goals.

XTRA 20 at a leading regional beverage bottler: For end-to-end efficiency, a high-performance rotary blowing system is currently operating within a bottling line at Mega Empack's customer, a leading regional beverage bottler. This machine represents the cutting edge of rotary blowing technology, offering high output with a very compact footprint.

Pioneering the Circular Economy: Lightweight Refillables

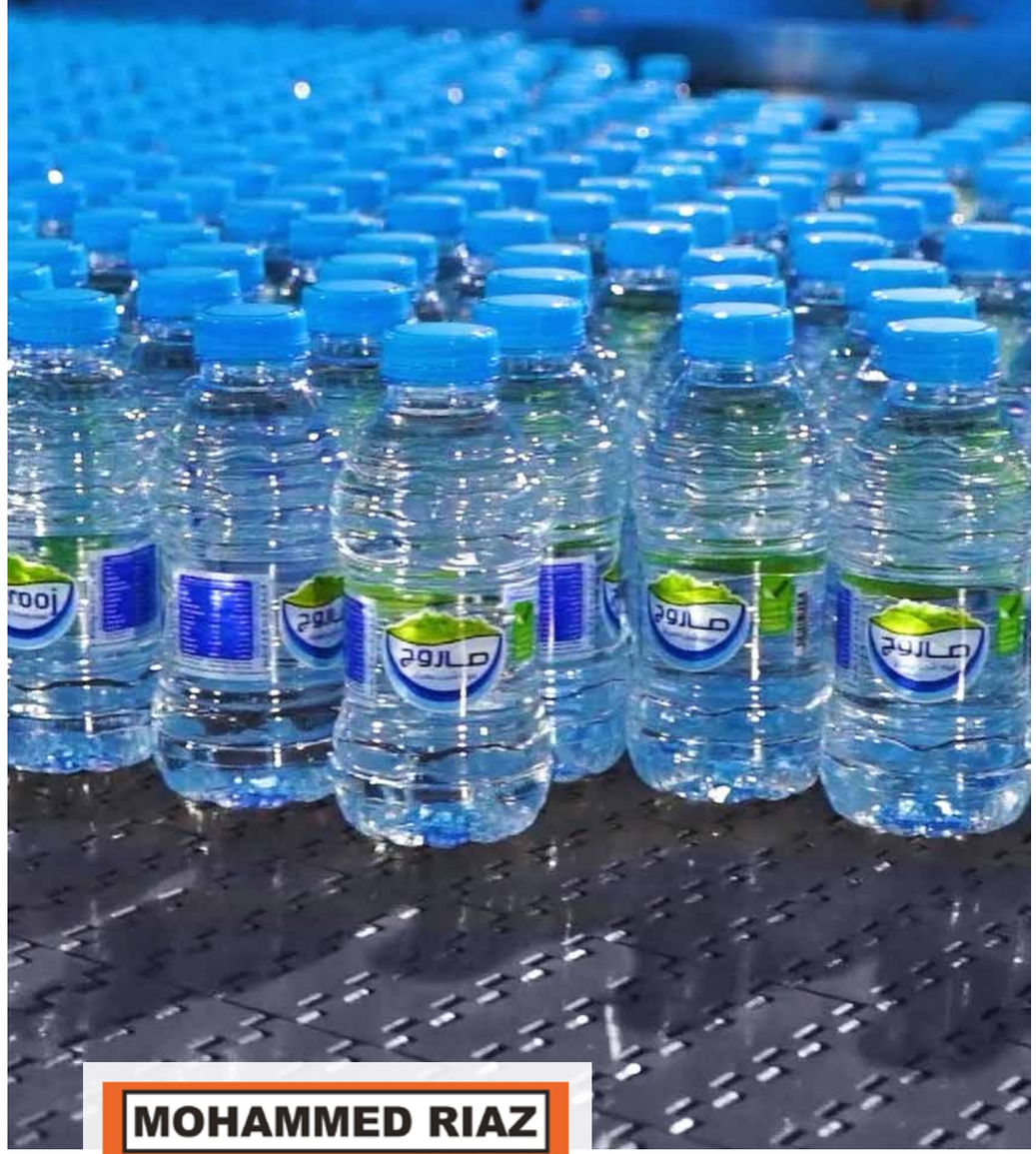
The most innovative chapter of this partnership focuses on the shift toward a circular economy. Mega Empack recently acquired dedicated SFL Dynamic technology specifically designed for the production of Refillable PET (RefPET) bottles.

These are not standard refillables. Through SIPA's specialized blowing technology, Mega Empack is producing **lightweight reusable bottles**. These containers are significantly lighter than traditional refillable PET designs, reducing the amount of raw material used and lowering transportation emissions, all while maintaining the necessary structural integrity to withstand multiple washing and refilling cycles.

From its roots in the Bepensa Group to its current status as a multinational packaging powerhouse, Mega Empack continues to push the boundaries of what is possible in PET manufacturing. Supported by SIPA's advanced XFORM, XTRA, and SFL technologies, Mega Empack is not only meeting the needs of giants like a leading regional beverage bottler but is also leading the charge toward a more sustainable, lightweight, and circular future for the Central American beverage industry.

OMAN

Purity in Motion: SIPA and Mohammed Riaz Partner to Redefine Oman's Bottled Water Market



MOHAMMED RIAZ & PARTNER LLC

We are proud to showcase a landmark collaboration with Mohammed Riaz & Partner LLC, a name synonymous with excellence and entrepreneurial spirit in the Sultanate of Oman.

Together, we have commissioned a high-speed, state-of-the-art bottling line for Sarooj Water, a brand that perfectly blends Omani heritage with future-ready technology.

A LEGACY OF EXCELLENCE: THE MOHAMMED RIAZ STORY

The journey of Mohammed Riaz & Partner LLC is a true testament to vision and perseverance. From its humble beginnings in **1979** as a single retail outlet, the group has flourished into a multi-million-dollar empire and a cornerstone of the Omani economy.

Under the leadership of its founder, Mr. Mohammed Riaz, and now guided by the fourth generation of the family, the group has expanded into a diversified powerhouse. With nearly **40 branches** across the country—stretching from the vibrant streets of Muscat to the strategic hubs of Sohar and Salalah—the company is a vital partner in achieving the goals of **Oman Vision 2040**.

SAROOJ WATER: A TRIBUTE TO OMANI HERITAGE

The group's flagship beverage, **Sarooj Water**, is inspired by the legendary strength of Oman's history. The name "Sarooj" refers to the traditional hydraulic mortar used for over **3,600 years** to construct the nation's magnificent forts and historic irrigation channels.

To match this legacy of endurance, Mohammed Riaz & Partner LLC required a production partner capable of delivering unmatched purity and efficiency. SIPA rose to the challenge, providing a complete turnkey solution that preserves the superior taste and quality of Sarooj Water while meeting the highest international hygiene standards.

ENGINEERING THE FUTURE: THE SIPA HIGH-SPEED LINE

To support the brand's rapid growth, SIPA engineered a high-performance line capable of producing a staggering **48,000 bottles per hour**. This fully integrated system offers the flexibility to switch seamlessly between **250ml, 500ml, and 1000ml** formats, ensuring Sarooj Water is ready for every occasion.

The bottling line includes:

- Sincro Bloc mod. 20-70-20: A masterclass in integration, combining the **XTRA 20** rotary blower with the **Flextronic S** gravity volumetric filler.
- **Sustainability at Scale**: The blower features our **Air Recovery System (ARS+)**, which significantly reduces energy consumption by recovering high-pressure air.
- **Purity Guaranteed**: The filler utilizes "no-contact" valves and an **ISO 7 cabin** to maintain an ultra-clean environment.
- **Precision Labeling**: The **Opera 400 RF** roll-fed labeller ensures a flawless shelf presence for the iconic Sarooj brand.
- **End-of-Line Excellence**: From the **Nova 40F** shrink wrapper to the **Genius PTF Active Layer** palletizer, every step is optimized for speed and reliability.

This partnership is more than just a technical success; it is a celebration of Omani culture and modern innovation. SIPA is honored to play a role in the Mohammed Riaz success story, helping to deliver the pure taste of Oman to consumers across the region.

SOUTH KOREA

SIPA and Samyang Packaging: strengthening a shared vision in South Korea

SAMYANG PACKAGING

The collaboration between SIPA and Samyang Packaging has reached a new milestone, marking a steady and significant step forward in our presence within the East Asian market. We are pleased to announce the successful commissioning of four XFORM 350 and one XFORM 250 preform production systems at Samyang's facility in South Korea.

This development represents a natural progression in our relationship with one of the region's most respected converters, focusing on long-term operational efficiency and technical excellence.

A PARTNERSHIP BUILT ON RELIABILITY AND INNOVATION

Samyang Packaging has long been a cornerstone of the South Korean PET industry. Since establishing the country's first PET bottle production in 1979, they have evolved into a comprehensive "Best Beverage & Packaging Solution Provider." Today, as the nation's leading converter, Samyang continues to set the standard for high-performance packaging across three core business pillars:

- **PET Containers**: Producing high-quality bottles for mineral water, carbonated drinks, and heat-resistant containers.
- **Aseptic Beverage Filling**: Operating as a premier Original Design Manufacturer (ODM) and Original Equipment Manufacturer (OEM) for sensitive beverages like teas, coffees, and dairy drinks.
- **PET Recycling**: Leading the circular economy through high-purity rPET production.

The integration of multiple XFORM systems into their production line reflects a mutual commitment to stable, high-quality manufacturing. By choosing SIPA technology, Samyang is enhancing its capacity to meet the evolving needs of the Korean market with a focus on precision and sustainability.

THE TECHNOLOGY: WHY XFORM?

The selection of the XFORM platform was based on its ability to provide a balanced combination of high-volume output and operational flexibility, aligning with Samyang's mission to provide "safe and convenient" packaging solutions.

1. **System Compatibility**: The XFORM's "open" design allows Samyang to utilize its existing mold inventory from various manufacturers. This flexibility is crucial for a company that manages a vast array of bottle designs for the South Korean market, ensuring a smooth integration into their current workflow.
2. **Operational Efficiency**: With the capability to handle high-cavitation molds, the system provides the massive output required for Samyang's large-scale operations—supporting their role as the dominant player in the local beverage industry—while maintaining a low energy footprint.
3. **Sustainability Ready**: Through its subsidiary **Samyang Eco-Tech**, the company is advancing PET recycling in Korea. The XFORM systems are ready to support these efforts, featuring an injection unit capable of processing up to **100% rPET**, helping Samyang achieve its ESG (Environmental, Social, and Governance) goals.

A foundation for the future

The successful startup of these five systems is a proud moment for SIPA. It reinforces our role as a supportive partner to Samyang Packaging, providing the technical reliability they need to continue their legacy of excellence. As Samyang continues to "awake the potential of life" through innovative packaging materials, SIPA stands ready to provide the technological backbone for their next chapter of growth in the global market.

02

FOCUS ON

secondary packaging

FROM POWER TO PALLET: COMPLETING THE HIGH-SPEED PET LINE WITH THE NEW GENIUS PTF PRO

In the evolving landscape of PET bottling, true excellence is found in perfect balance. With the SIPA Sincro Tribloc setting a new gold standard by integrating blowing, labeling, and filling at 90,000 bottles per hour (bph), the stage is set for a revolution in end-of-line performance.

To fully harness this incredible upstream power, SIPA has engineered a palletizing solution that doesn't just keep up—it propels the final stage of the process forward. The **New Genius PTF PRO** is the high-speed palletizer designed to ensure your output transitions flawlessly from the line to the warehouse.

Mastering the "Overspeed" at the Finish Line

For a line to remain fluid, the equipment at the end must be faster than the equipment at the start. By achieving a consistent speed of **8.5 layers** per minute, the New Genius PTF PRO ensures that the massive volume generated by the Sincro Tribloc never faces a bottleneck as it exits the production floor. Even at these high speeds, the system is engineered for **gentle handling**, ensuring packs are treated delicately and without stress to maintain product integrity.

Innovation in Motion: Key Features

The new **Genius PTF PRO** is high tech SIPA's fastest in-line **Steady Pallet palletizer** with a **low-level product infeed** design. This configuration is preferred by modern producers for its ergonomic accessibility and compact footprint and is among the most compact traditional high-speed palletizers on the market

- **Double Moving Platform**: The system utilizes **full brushless** double-platform technology with integrated layer accumulation. This allows the machine to prepare new layers while simultaneously placing others, maximizing every second of the cycle.
- **Fast Layer 2.2R (Dual Suspended Robots)**: Layer formation is handled by overhead robots, eliminating floor-level mechanical bulk. These robots use a **patented double gripper** for rapid, surgical precision.
- **Patented Layer Platform**: This specialized platform ensures that even the most lightweight bottles remain perfectly stable during the final transfer to the pallet.
- **Robust Construction**: The machine features a very sturdy, stable, and compact structure designed for longevity.

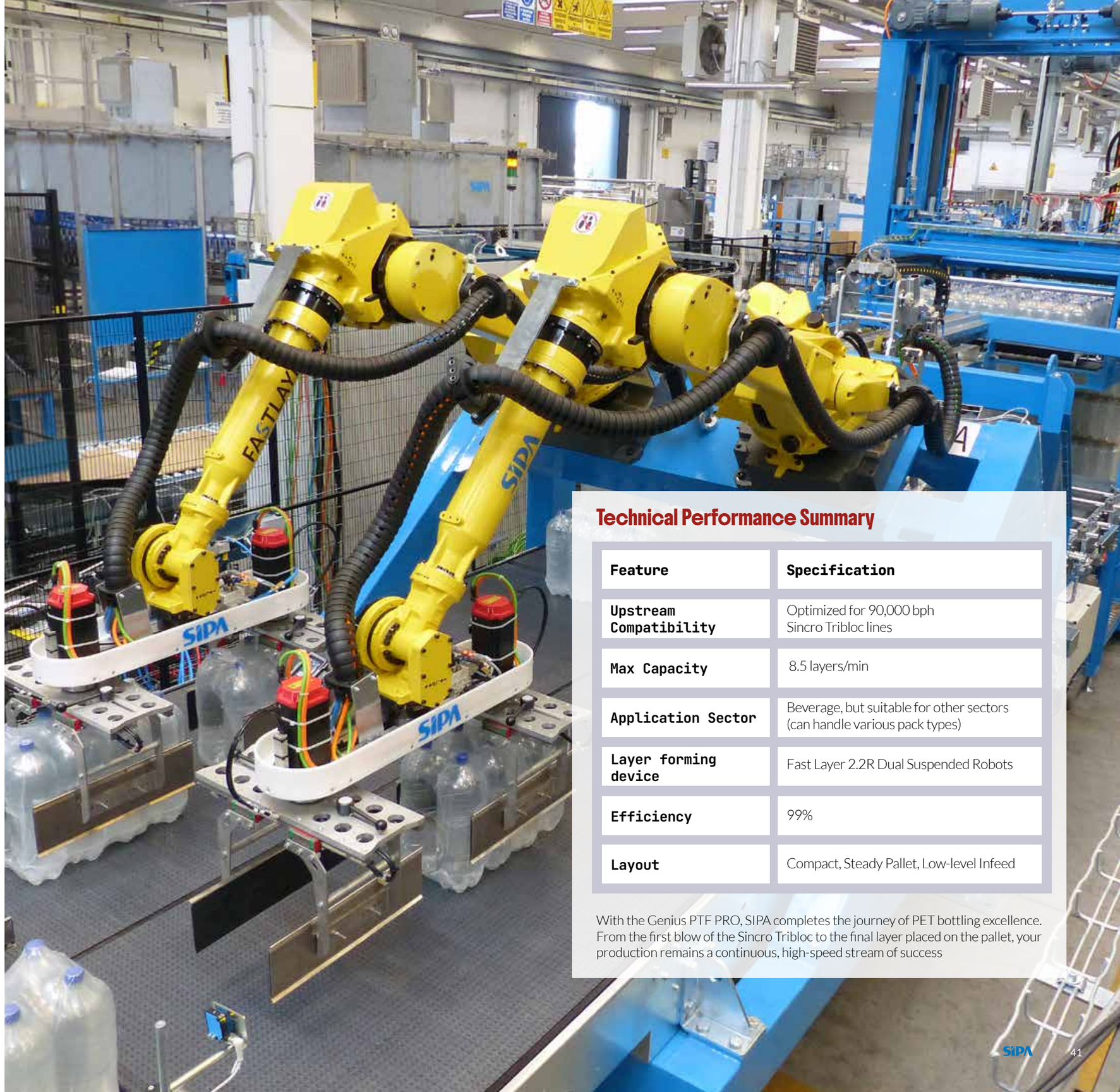
Intelligence & Control: SIPA's HMI

The "brain" of the new Genius PTF PRO is as advanced as its mechanics. By developing the Human-Machine Interface (HMI) with **Zenon technology**, SIPA provides operators with a premium digital command center:

- **User-Friendly**: The 21" vertical interface monitor features an intuitive, highly accessible layout that simplifies complex operations, making it easy for any operator to master the system quickly.
- **Real-Time Diagnostics**: Visualize the entire palletizing cycle at a glance, ensuring any irregularities are caught before they impact efficiency.
- **Energy Transparency**: An integrated monitoring system tracks power consumption in real-time, aligning your end-of-line with global sustainability goals.
- **Swift Format Changes**: The user-friendly dashboard makes switching between different bottle sizes or pallet patterns fast and error-free.

Maintenance-First Engineering

SIPA designed the Genius PTF PRO to be as easy to maintain as it is to run. Because it is a **low-level infeed machine**, all primary moving parts are accessible from the ground level, eliminating the need for technicians to use ladders or platforms for routine checks. Furthermore, high-performance servomotors reduce mechanical wear, contributing to the system's impressive **99% efficiency rating**. Despite these high speeds, the system ensures gentle product handling, treating every pack with care to eliminate stress and maintain container integrity.



Technical Performance Summary

Feature	Specification
Upstream Compatibility	Optimized for 90,000 bph Sincro Tribloc lines
Max Capacity	8.5 layers/min
Application Sector	Beverage, but suitable for other sectors (can handle various pack types)
Layer forming device	Fast Layer 2.2R Dual Suspended Robots
Efficiency	99%
Layout	Compact, Steady Pallet, Low-level Infeed

With the Genius PTF PRO, SIPA completes the journey of PET bottling excellence. From the first blow of the Sincro Tribloc to the final layer placed on the pallet, your production remains a continuous, high-speed stream of success

THE ROBBY RACK: 25 YEARS OF HEAVY-DUTY MASTERY

The Robby Rack represents more than just a machine; it represents a quarter-century of SIPA's leadership in large-size container handling. When SIPA first introduced this configuration in 2000, we were on the front line of a shifting market. Today, with over 25 years of seniority in this specialized field, the Robby Rack has evolved into the most sophisticated 6-axis robotic solution for 3- and 5-gallon bottles.

At the center of our booth (Hall 13/B64) during Interpack in Düsseldorf, we are proud to showcase a live demonstration of our industry-leading palletizing system: the Robby Rack.

Why the Robby Rack stands at the high end of the market:

- **Versatile Geometry**: While standard systems struggle with non-traditional shapes, our experience spans round, triangular, and rectangular 5-gallon containers.
- **Intelligent Software**: Our latest software automatically adapts to the specific rack type in use, ensuring seamless transitions between different formats.
- **Operating Precision & Safety**: The heart of the Robby Rack is its proprietary gripping head, designed to handle up to 10 full 5-gallon bottles simultaneously without causing a single scratch. Furthermore, internal safety protocols are designed to detect damaged or defective racks, halting the cycle instantly to prevent equipment damage.
- **Modular Evolution**: As your production needs change, our modular gripping system allows for easy interchangeability, ensuring your investment remains relevant for decades.

Whether you are looking for palletizing, depalletizing, or combined cycles to simultaneously empty and fill racks, the Robby Rack remains the industry benchmark for reliability.

03

TECHNICAL WINDOW

Latest Developments.

XFORM RENEW:

the evolution of direct flake-to-preform technology

The Core of Circular PET

As the global PET industry moves toward the 2030 targets set by the European Circular Economy plans, the demand for high-quality recycled content has transitioned from a niche requirement to a core industrial necessity. At the forefront of this shift is SIPA's XFORM Renew, a system that represents the culmination of over a decade of research into direct flake-to-preform processing.

A proven technical pedigree

The concept of bypassing the pelletizing stage to save energy and protect material quality is a journey that began at SIPA in 2014. We were the first to market several years ago with **Xtreme Renew**, a revolutionary injection-compression system designed to produce preforms directly from hot-washed flakes.

Today, capitalizing on that extensive field experience, we have successfully integrated this "direct-to-preform" capability into our flagship **XFORM** platform. This development was a central theme of our presentation at the PETCORE conference in mid-February, where it was introduced to PET industry leaders, shareholders, and European Commission delegates as a practical solution for the next generation of rPET production

Engineering the "Short-Cut"

The XFORM Renew simplifies the rPET production chain by eliminating the traditional pelletizing stage—a process that normally requires melting, cooling, cutting, and re-drying.3 By skipping these steps, the system achieves a "single thermal history" for the polymer.[4]

This streamlined approach, developed in long-standing partnership with the Austrian recycling technology leader EREMA, offers significant advantages:

- **Environmental Impact:** A verified **80% reduction in CO_2 emissions** compared to virgin PET and an **18% lower Global Warming Potential** than traditional rPET pellet processes.
- **Energy Efficiency:** A **30% reduction in electricity consumption** by removing the need for pellet distribution, warehousing, and subsequent re-drying.
- **Material Quality:** Minimal thermal stress results in superior preform aesthetics, with improved color and clarity that are easily visible to the naked eye.
- **Economic Performance:** Total Cost of Ownership (TCO) can be reduced by up to **35%**, thanks to lower resin costs (flakes vs. pellets) and a **20% reduction** in logistical footprint.

Industrial scale and market readiness

A key factor in the market's enthusiastic reception of XFORM Renew is its compatibility with high-volume production. By utilizing SIPA's consolidated injection technology, the system supports molds with up to **200 cavities**, reaching an output of **144,000 preforms per hour**.

This performance has already earned the technology industry recognition, including a Sustainability Award 2025 in the Machinery category, but the focus is now firmly on industrial implementation

The Path Forward: commercial deployment

The project is now entering its most critical phase: the installation of several XFORM Renew industrial systems at the facilities of strategic partner customers.

These units will produce preforms directly for the high-demand beverage market, serving as a real-world demonstration of how SIPA's technology can make the circular economy both ecologically vital and economically profitable.

Through XFORM Renew, SIPA continues to lead the PET packaging sector, transforming the challenge of plastic waste into a streamlined, high-performance resource.

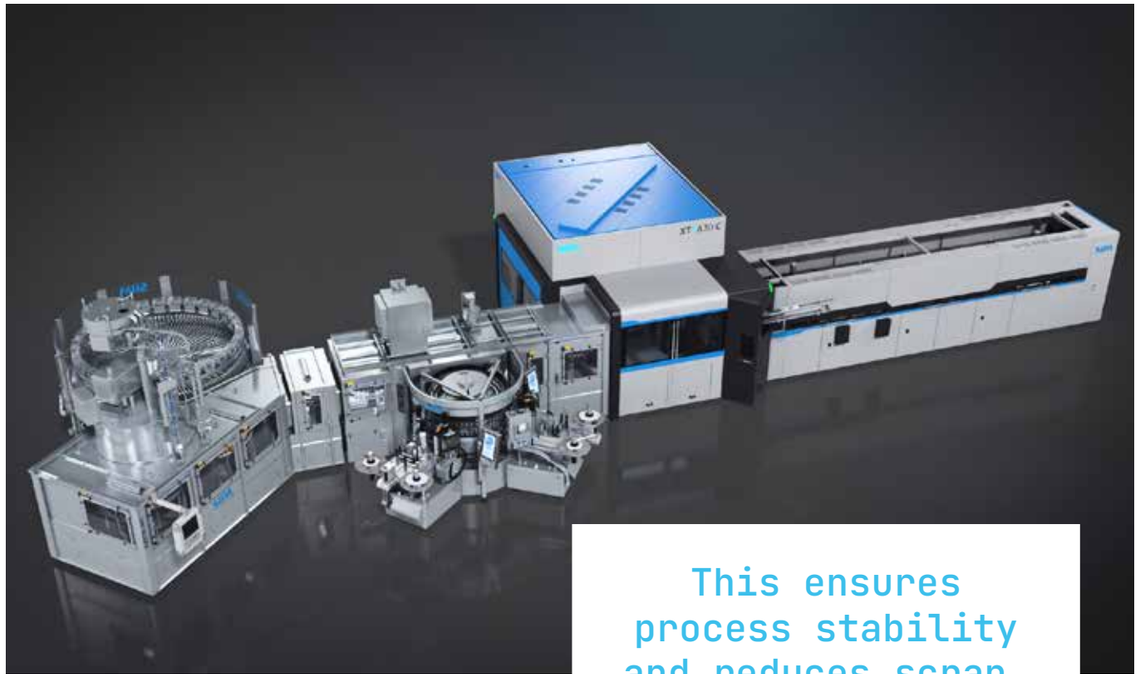
SIPA SINCRO TRIBLOC:

Integrated Power for PET Bottling Excellence

In a market where speed, efficiency, and sustainability define competitiveness, SIPA's new **Sincro Tribloc** emerges as a game-changing solution. Designed for **high-speed production up to 90,000 bottles per hour**, this innovative system combines **blowing, labelling, and filling/capping** into a single compact block, setting new benchmarks for integrated PET bottling.

A FULLY INTEGRATED SOLUTION

The **Sincro Tribloc** directly connects the **XTRA rotary blower**, the **XLABL roll-fed labeller**, and the **FLEXTRONIC electronic filler**, eliminating the need for intermediate conveyors. This not only simplifies the overall line management but also reduces the footprint, lowers operating costs, and improves energy efficiency. The result is a smart, streamlined solution that enables producers to handle high-speed production without compromising on quality, flexibility, or hygiene.



This ensures process stability and reduces scrap, while the system's space-saving design and flexibility support consistent, **high-speed performance** without the need for an expanded factory footprint.

BLOWING WITH XTRA:

Speed, Precision, and Compact Design

At the heart of the blowing process is SIPA's XTRA rotary blower, delivering a remarkable speed of **3,000 bottles per hour per cavity (bhc)**. To further optimize plant space, SIPA introduces the **XTRA Compact** range, specifically designed for native integration into **SincroBloc** and **SincroTriBloc** systems.

By utilizing an extremely small layout, the **XTRA 30 COMPACT** achieves the same footprint as a standard XTRA 20 unit, while delivering a massive output of **90,000 bph**. For mid-to-high range needs, the **XTRA 24 COMPACT** provides a steady **72,000 bph**, with oven sizes customized according to specific project requirements.

The XTRA's wide 275° process angle ensures optimal material distribution, making it possible to achieve excellent results even with ultra-lightweight bottles—such as 4.9g for a 0.5-liter format. The integrated **Oven Plus** system offers precise thermal control of the preforms, adapting dynamically to external conditions.

LABELLING WITH XLABL:

Precision Meets Continuity

The labelling phase is driven by the **XLABL roll-fed labeller**, combining speed, precision, and ergonomic design. Bottles are stabilized by an advanced handling system featuring grippers and bottom cooling, ensuring optimal conditions for accurate label application. An **automatic reel splicing mechanism** enables uninterrupted operation, while a straight-blade cutting system ensures reliability and fast, tool-free maintenance. Notably, the exceptional durability of the blades can withstand up to 200 milion cuts.

The label is transferred via a vacuum roller and applied on the carousel using a glue dispensing system and a final wiping stage for flawless placement. In order to label extremely lightweight bottles, thos need to be pressurized with the use of sterile air. Remarkably, this is achieved with just **one labeller**—capable of maintaining the line's full output of **90,000 bottles per hour**.

The cap feeding system includes buffering features and anti-obstacle mechanisms, maintaining a steady flow and reducing system interruptions. Optional quick neck changeovers and various cap treatment options provide additional flexibility and help ensure total process reliability.

THE COMPETITIVE EDGE:

Why Choose Sincro Tribloc?

With **95% overall line efficiency**, the **Sincro Tribloc** stands out as one of the most productive and compact systems on the market. Its integrated architecture leads to substantial savings: energy consumption is reduced, fewer operators are required, and changeover and maintenance times are significantly cut. The system is fully compatible with **100% rPET**, supports the use of **ultra-lightweight containers**, and delivers **up to 15% savings in overall operating costs**.

FILLING & CAPPING WITH FLEXTRONIC:

Flexible, Hygienic, and Efficient

The final stage of the process is managed by the **FLEXTRONIC modular filler**, part of SIPA's family of volumetric electronic systems. This highly adaptable platform handles a variety of product types, including still water, soft drinks and hot-fill applications, within the same line.

A micro-isolator-protected environment ensures maximum hygiene for sensitive beverages, while the XFILL configuration allows direct integration with product preparation units.

Thanks to its optimized layout, the Sincro Tribloc occupies **up to 30% less space** compared to traditional standalone equipment. Accessibility has also been enhanced—particularly around the labelling area—making the system not only efficient but also user-friendly and easy to maintain.

FUTURE-PROOF YOUR LINE WITH SIPA SINCRO TRIBLOC

From preform to cap, every step of the **SIPA Sincro Tribloc** is designed for performance, efficiency, and long-term savings. Whether you're expanding capacity, adapting to sustainability goals, or simply looking to stay ahead in a competitive market, the Sincro Tribloc offers a comprehensive and forward-thinking solution.

Leading the High-Speed Revolution with XTRA COMPACT

INTRODUCTION:

The Small Giant of High-Speed Blowing

In an era where production floor space is as valuable as the energy used to run it, SIPA is once again going ahead by challenging the traditional trade-off between machine size and output. The global demand for single-serve beverage packaging continues to surge, requiring manufacturers to find solutions that deliver massive volumes without massive footprints. Enter the **XTRA COMPACT**: a new concept in rotary blowmolding designed to deliver "performance beyond the limits".

By achieving an incredible rate of 3,000 bottles per hour per cavity (bhc), the XTRA COMPACT doesn't just keep up with the market—it sets a new standard for what a compact blowing press can achieve.

Engineering the "More Solid" Advantage

To reach a total output of **90,000 bph** within a refined frame, SIPA's R&D team focused on "Key Innovations" that prioritize durability and precision. Under the hood, the XTRA COMPACT is "More Solid" than ever, featuring:

- **Reinforced Dynamics:** A new oven chain and reinforced transfer arms are designed to handle the high-frequency stresses of 3,000 bhc.
- **Precision Handling:** A wider transfer wheel equipped with more arms ensures a smooth transition at high speeds.
- **Optimized Motion:** The machine frame and motion profiles have been re-engineered to eliminate vibration, ensuring consistent bottle quality even at peak performance.
- **Next-Gen Preform Loading:** Utilizing a new in-line preform aligner, the system ensures flawless feeding.

The most striking feature of the XTRA COMPACT is its layout efficiency. A producer can now install an **XTRA COMPACT 30** (90,000 bph) in the exact same footprint previously required for a standard **XTRA 20**.

This 50% increase in capacity without expanding the factory walls represents a significant leap in Total Cost of Ownership (TCO) and operational sustainability.

FEATURE	SPECIFICATION
Max Output (Water)	3,000 bhc @ 16 bar
Max Output (CSD)	2,600 bhc @ 20 bar
Changeover Speed	30-second tool-less mold change
Integration	Native for SincroTriBloc & SincroBloc

FUTURE-PROOFING THE PRODUCTION LINE

With its 30-second tool-less mold change and native compatibility with **SincroTriBloc systems**, it offers the agility required for today's fast-moving consumer goods (FMCG) market. By focusing on the 750ml single-serve segment and maximizing every square inch of the machine's footprint, SIPA ensures that its partners are not just growing—they are growing efficiently.

The XTRA COMPACT is more than just a fast machine; it is a unique asset in the SIPA portfolio.

PRECISION MADE SIMPLE:

Enhancing Blowmolding Performance with SIPA's Process Wizard

In the high-stakes world of PET production, the difference between a perfect batch and costly waste often boils down to a single variable: the complexity of machine setup. Even the most skilled operators face challenges when switching between different preforms or bottle geometries.
To bridge this gap, SIPA has introduced the Process Wizard, a patent-pending software solution for the XTRA rotary blowmolding machine. This digital assistant is designed to reduce human error while making high-level process management accessible to everyone.

THE PROCESS WIZARD:

Intelligence Guided by Data

The Process Wizard acts as a supportive partner for your production team. By entering only the **preform and bottle geometry**, the software takes over the heavy lifting of technical configuration.

- **Automatic Configuration:** It utilizes a proprietary SIPA algorithm to automatically set up the recipe for both the oven and blow parameters.
- **Repeatable Excellence:** By automating these calculations, the software ensures a **simple and repeatable set-up**, regardless of the operator's individual experience level.
- **Rapid process set-up:** It serves as an easy tool to support new tests, whether you are introducing a **new preform or a new mold**.
- **Educational Support:** Beyond production, it acts as a training tool to support **operators' self-learning**, helping them understand the nuances of the blowing process.

XTRA:

A Platform Built for Ease of Use

While the Process Wizard provides the "brains," the XTRA machine itself is engineered for **extra simplification** across the board. Managing a high-performance rotary blowmolder has never been more affordable or straightforward.

1. Rapid Tool-less Changeovers

Format changes no longer require a toolbox or hours of downtime. The XTRA allows for a **tool-less mold changeover in just 30 seconds**, paired with a quick neck change-over system.

2. Intuitive Interface and Accessibility

The machine features a **simple and supportive HMI** (Human Machine Interface) that guides the user through every step. This is complemented by a physical design that offers **great accessibility** for maintenance and daily operations.

3. Integrated Efficiency "Plus"

The XTRA platform includes a suite of integrated technologies to optimize every resource:

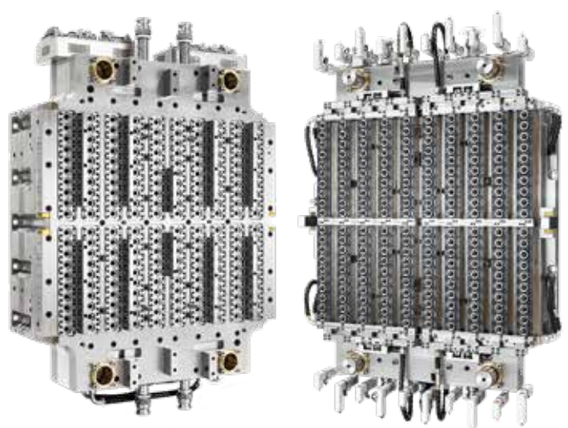
- **ARS+ Self-Tuning:** Automatically optimizes air recovery to reduce consumption.
- **Oven Plus:** Advanced heating control for energy efficiency and preform quality.
- **Water Plus:** Optimized cooling for faster, more stable cycles.

4. Digital Connectivity

The XTRA isn't just a standalone machine; it is fully **integrated with the ECHO platform**. This allows for seamless **data exchange and process control**, ensuring that your production data is always transparent and actionable.

REDEFINING THE ECONOMICS OF PLASTIC PACKAGING:

How SIPA's 200-Cavity Systems Decoupled Volume from Cost



In the high-stakes world of PET preform production, the line between healthy margins and operational stagnation is often measured in fractions of a cent. As global bottling lines accelerate toward speeds of 100,000 bottles per hour (BPH), the industry has reached an inflection point. The traditional methods of scaling—simply adding more machines—are no longer enough.

SIPA, a longtime pioneer in packaging technology, recognized this shift early. By 2018, while the rest of the market was still perfecting the 144-cavity industry standard, SIPA took a leap that redefined the ceiling of what was possible: the jump to **200 cavities**.

The Pioneer of "Super-High" Cavitation

SIPA didn't just follow the market; they anticipated its need for higher density and faster returns. By launching the XFORM 500 equipped with the world's first 200-cavity preform mold, they effectively decoupled volume from traditional cost structures.

Today, this isn't just a prototype or a niche solution. SIPA's high-cavitation systems are operating on every continent, boasting a **60-70% rate of repeat orders**. This level of market trust signals that "super-high" cavitation isn't just about being the biggest—it's about being the most reliable.

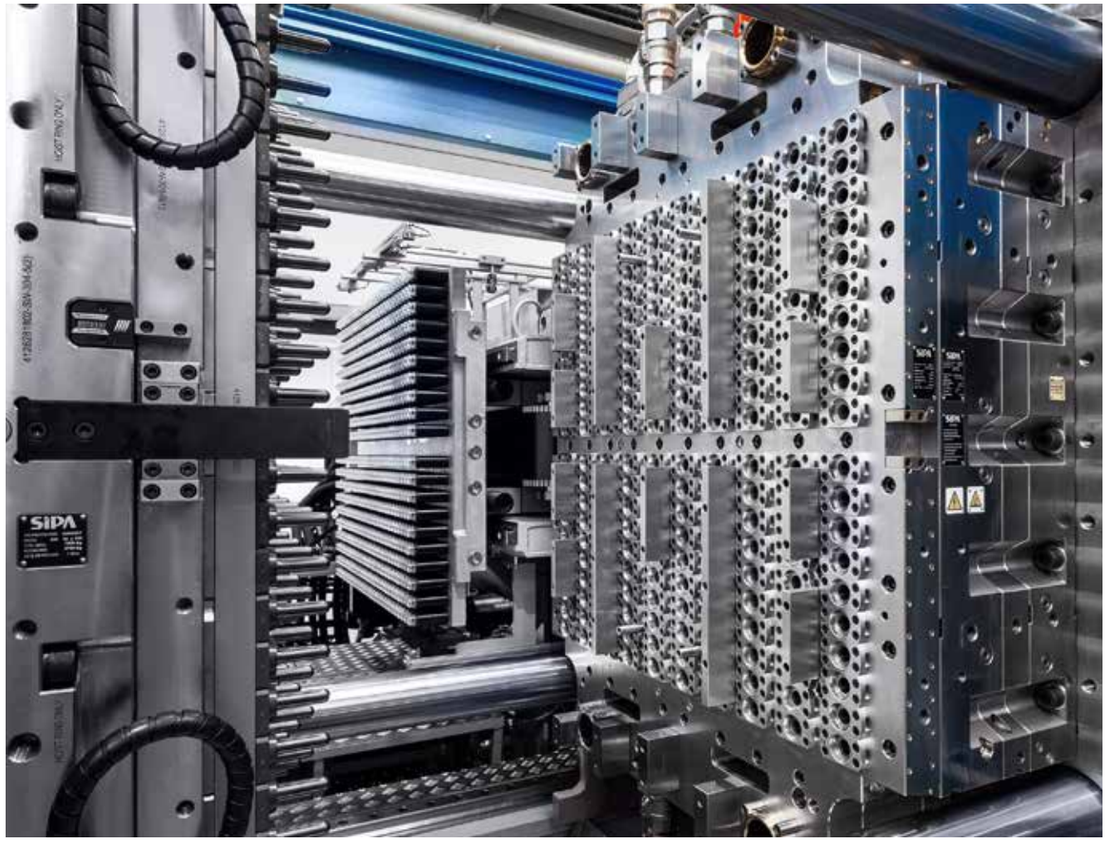
ECONOMIC EFFICIENCY:

The Shortest Path to ROI

For a high-volume producer, the "conversion cost"—the cost of turning raw resin into a finished preform—is the ultimate KPI. SIPA's 180 and 200-cavity systems allow producers to exploit the full tonnage of a 500-ton machine, maximizing the output per square meter of factory floor space.

This maximization of equipment leads to three distinct economic advantages:

- **Lowest Conversion Cost:** By producing more units on a single footprint, overhead and energy costs are diluted across a much larger volume.
- **Sustainability through Optimization:** High cavitation reduces the electricity consumption per unit and optimizes the manpower required to manage the line.
- **Rapid Capital Recovery:** In the competitive 100k BPH bottling sector, these efficiencies provide the fastest possible path to ROI.



THE "OPEN SYSTEM" ADVANTAGE:

Putting Power Back in the Customer's Hands

One of the most significant barriers in the packaging industry is "vendor lock-in." Many competitors design systems that only function with their proprietary molds, essentially trapping the customer in a single ecosystem.

SIPA has taken a different, more transparent approach. The XFORM platform is a truly **Open System**. It is designed for total compatibility, accepting third-party molds from other major industry players.

This flexibility ensures that converters and in-house bottlers remain agile, allowing them to choose the best tooling for their specific needs without being restricted by machine hardware.

PRECISION AT SCALE:

High Velocity Meets High Quality

A common concern with high-cavitation systems is that "more" might mean "less" in terms of quality control. SIPA has proven the opposite. Through thoroughly engineered hot runners and optimum melt distribution, they have achieved technical benchmarks that exceed industry standards:

- **Low Acetaldehyde (AA) Levels:** Critical for maintaining the sensory profiles of beverages.
- **Superior Process Capability:** SIPA systems consistently deliver a **Cpk on weight of >2.5**. In a world where weight tolerance is everything, this level of repeatability ensures that every preform is as perfect as the first.

PETWORK

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– What’s New in Packaging World.

New Industry Standard: ULTRA-LIGHT 25/22 NECK Finish for Still Mineral Water

SIPA continues to push the boundaries of material efficiency with the industrialization of the 25/22 neck finish. Weighing a mere 0.9g, this design represents the lightest neck finish currently available on the market, specifically engineered to meet the rigorous demands of the global still mineral water (SMW) sector.

Developed by SIPA's expert Design Department, the 25/22 finish is a response to the industry's increasing need for sustainable, high-performance packaging.

While already a success in key markets such as the USA, Middle East, and Africa, this neck finish is now being adopted by the main OEMs in the market for their latest generation of lightweight (LW) bottles.

PRECISION ENGINEERING FOR HIGH-OUTPUT LINES

The 25/22 neck is not simply a reduction in size; it is a sophisticated technical solution optimized for high-speed production environments.

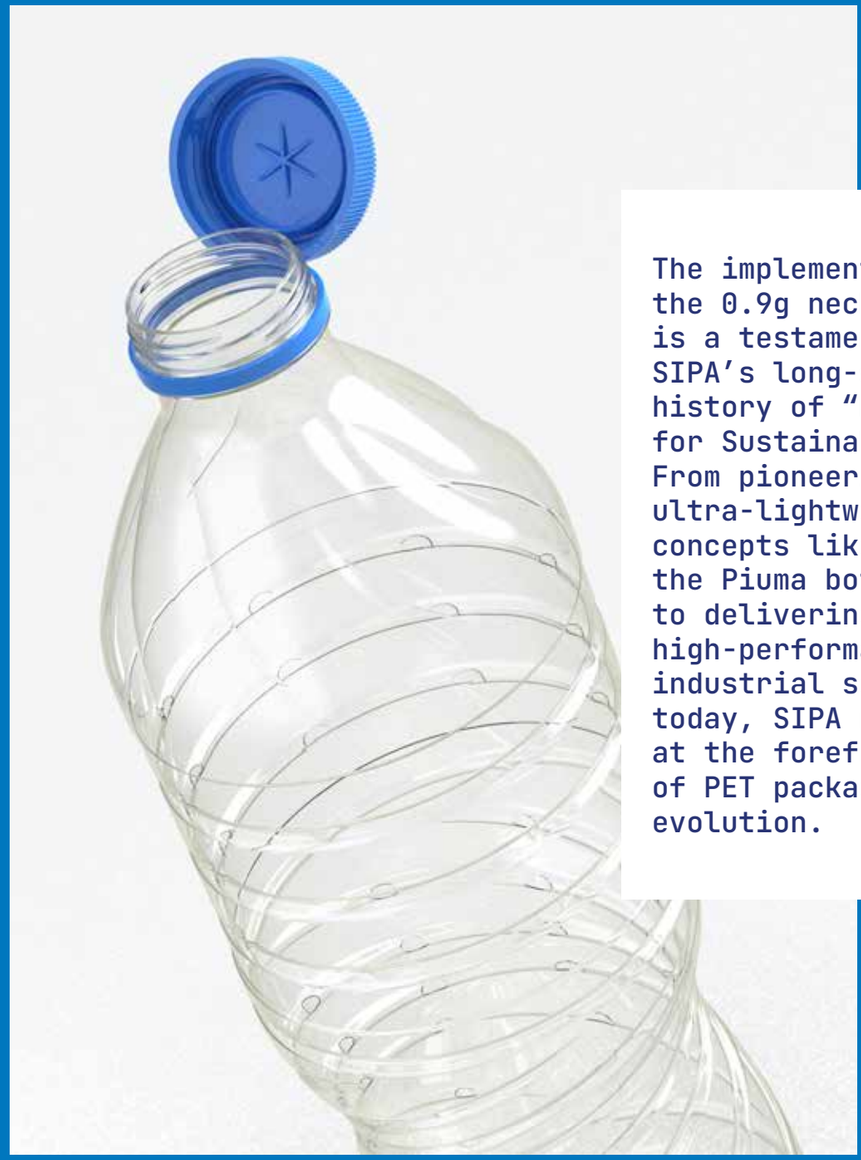
- **Record-Breaking Lightweighting:** At **0.9g**, it offers a significant reduction in PET resin consumption compared to traditional finishes, directly lowering the carbon footprint and production costs.

- **Full Regulatory Compliance:** The finish is specifically designed to be compatible with **25.22 tethered caps**, ensuring producers meet the latest European environmental standards regarding single-use plastics.

- **Structural Versatility:** The design is fully suitable for **nitrogen (N_2) dosing** applications. This capability was notably demonstrated in SIPA's **Piuma project**—the 4.95g/500ml bottle—where the 25/22 neck provided the necessary integrity to support ultra-thin walls through internal pressurization.

- **Thermal Efficiency:** The reduced mass allows for optimized cooling times during the injection process, facilitating faster cycle times on high-output water lines.

A LEGACY OF INNOVATION



The implementation of the 0.9g neck finish is a testament to SIPA's long-standing history of "Design for Sustainability." From pioneering ultra-lightweight concepts like the Piuma bottle to delivering high-performance industrial solutions today, SIPA remains at the forefront of PET packaging evolution.

"Our 25/22 neck finish is a key tool for water bottlers looking to combine extreme lightweighting with mechanical reliability," says the SIPA Design Team. "By providing a solution that is tethered-ready and N2 compatible, we are helping our customers future-proof their production lines."

SIPA AND ARMA FOOD: a collaborative approach to edible oil packaging in Egypt

The long-standing cooperation between SIPA and Arma Food is built on a shared commitment to quality and market-driven innovation.

Since 1992, Arma has been a cornerstone of the Egyptian homecare and food sectors, and SIPA has been a consistent partner in helping translate their brand vision into high-performance packaging.

TECHNICAL SYNERGY

To support their production needs, Arma Food has integrated **two SIPA SFL BIG 6** systems over the past years. These linear blow-molding machines provide the necessary flexibility to produce a wide variety of formats for the **Crystal Edible Oil** line, ensuring consistent quality for both their sunflower and corn oil products.

DESIGNING FOR THE MODERN CONSUMER

When refreshing the identity of the Crystal brand, Arma looked to SIPA's design expertise to create a package that reflects the core values of the product: **high quality**, **clarity**, and **organicity**. The goal was to move beyond a standard container to create a package that resonates with young, modern consumers through a focus on:

- **Pureness:** Enhancing the natural transparency of the oil.
- **Ergonomics:** Ensuring the bottles are comfortable for everyday kitchen use.
- **Shelf Presence:** Creating a distinct look that stands out in a crowded market.

A UNIFIED DESIGN LANGUAGE: THE “CRYSTAL” AESTHETIC

The collaboration resulted in a multi-format family of bottles linked by a unique, recognizable feature: a **precious faceted decoration** integrated between the label panels.

This bespoke leaf-shaped design serves as a physical nod to the natural origin of the seeds, while the crystal-like embellishments emphasize the premium nature of the oil.

A COMPREHENSIVE FORMAT RANGE

The flexibility of the SFL systems allows Arma to produce a diverse range of packaging on the same platform:

- **700ml and 1L:** Sleek round shapes for standard use.
- **1.6L, 2.2L, and 3.5L:** Ergonomic oval shapes featuring integrated handles for larger volumes.

All formats are finished with dual-language (Arabic and Latin) self-adhesive labels, ensuring the Crystal brand remains accessible to both local Egyptian consumers and the international market.

PETWORK

BEYOND THE BOTTLE:

SIPA's Design Mastery Meets the New XLABL

In the world of packaging, a bottle is never just a container; it is a brand's primary ambassador. For years, SIPA's design department has been synonymous with engineering excellence—creating bottles that are lightweight, sustainable, and high-performing.

However, the true "magic" of a product happens where engineering meets emotion.

To truly make a brand identity shine, the bottle and the label must exist in a state of perfect synergy. That is why SIPA has evolved its design philosophy to offer a holistic approach: **we don't just design the bottle; we craft the entire visual experience**.

A 360-Degree Design Philosophy: Branding with a Purpose

Our design team understands that a label is the "voice" of the bottle. By integrating label design into our initial structural engineering phase, we go beyond simple measurements to offer **full creative graphic development**. We ensure that:

- **Ergonomics and Aesthetics Align:** Label placement is optimized for the bottle's specific curves, ensuring no wrinkling or misalignment during high-speed application.
- **Creative Brand Evolution:** We translate a brand's DNA into fresh, compelling visual elements that pop on the shelf, handling the artistic direction from the ground up.
- **Material Harmony:** We select label substrates that complement the PET or recycled materials of the bottle for a premium tactile feel.

THE FOCUS: CREATIVE DESIGN MEETS TECHNICAL FEASIBILITY

The core of our service is the seamless link between creative inspiration and industrial reality. While many agencies design labels that look good on a screen but fail on the production line, SIPA guarantees feasibility.

Our creative process is "machine-aware." We develop labels with a deep understanding of how they will behave during the labelling process, ensuring that the most ambitious branding concepts are perfectly executable. This minimizes waste, prevents application errors, and ensures that the final product looks exactly like the approved mock-up.

INTRODUCING XLABL: THE FUTURE OF LABELLING

To bring these designs to life with clinical precision, SIPA is proud to highlight the **XLABL**, our latest innovation in labelling technology.

The XLABL is a flexible, high-speed modular labeller designed to handle various application technologies (such as roll-fed, cold glue, or pressure-sensitive) on a single platform. Its ergonomic design and quick changeover capabilities make it the ideal partner for brands that demand versatility without sacrificing efficiency.

THE ULTIMATE COMMERCIAL EDGE: THE "ARTWORK-TO-PRINT" PACKAGE

We are excited to announce that the XLABL is more than just a machine; it is now a gateway to a complete branding solution. For companies investing in the XLABL, SIPA now offers a dedicated Label Design Package.

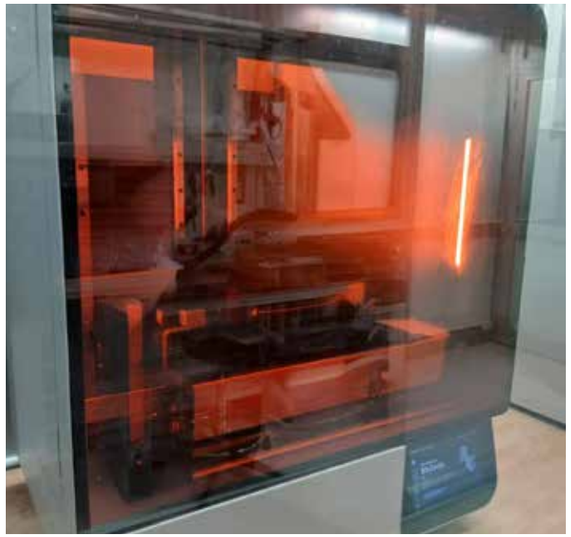
This isn't just a conceptual sketch. We provide a full design service that takes your vision from a blank canvas to press-ready artwork. We deliver the technical specifications, layout, and high-resolution files required by printers, ensuring that the physical label on your XLABL matches the digital dream perfectly.

By bundling world-class machinery with professional creative services, we eliminate the friction between "design" and "production," giving our partners a faster route to market and a more impactful, high-end shelf presence.

SIPA ADDITIVE: FAST PROTOTYPING NOW AVAILABLE

SIPA has officially launched **SIPA Additive**, a new service designed to provide customers with a fast and cost-effective solution for packaging development. Located at the SIPA HQ Plant, the dedicated SIPA Additive Room is now fully operational, managed by specialized personnel and equipped with diverse 3D printing technologies.

This new service integrates seamlessly with SIPA's existing packaging development suite, offering a "fast track" for brands to move from initial concept to a physical model.



THE STRATEGIC ADVANTAGES OF FAST 3D PROTOTYPING

The launch of SIPA Additive brings significant competitive advantages to the development cycle, acting as a catalyst for innovation:

- **Compression of Time-to-Market:** Traditional sampling often requires waiting for mechanical tooling. SIPA Additive transforms this into a rapid process, allowing for overnight iterations. Marketing and technical teams can evaluate a physical "mock-up" immediately, identifying potential improvements before committing to production.
- **Tactile and Visual Validation:** Digital models cannot replace the experience of a physical prototype. Our **SLA (Stereolithography)** technology produces fully transparent models, offering a realistic preview of the final container. This allows customers to test ergonomics, grip, and "hand-feel" at a very low cost.
- **Functional Technical Support:** Beyond aesthetic bottles, the service supports engineering needs. Using **FDM (Fused Deposition Modeling)**, we can quickly produce personalized blow mold parts or functional components to test mechanical compatibility.

TECHNOLOGIES AND SERVICES

The SIPA Additive Room utilizes diverse platforms to ensure precision and versatility:

- **SLA (Resin Formlabs):** TFor high-resolution models and precise aesthetic details.
- **FDM (Bambulab Wire):** For functional prototypes and durable technical parts.

AVAILABLE 3D PRINTING SERVICES:

- **Bottle Prototyping:** Fully transparent, transparent opaque (unpolished), or white finishes.
- **Technical Parts:** Personalized components, blow mold parts, and more.

How to Start a Project:
Open a dedicated **PAD** and click **"3d printing launch,"** remembering to mention the correct bottle code. For general info or project status, contact: **sipa-additive@zoppas.com.**

A 360-DEGREE PACKAGING PARTNER:

The SIPA Advantage

The introduction of SIPA Additive does not stand alone; it strengthens an already comprehensive portfolio of internal services that sets us apart in the global market. Unlike many competitors who outsource various stages of development, SIPA provides a fully integrated, in-house approach. This synergy ensures that a design born in our studio is perfectly optimized for the reality of the production floor.

Our leadership in the industry is built upon these core pillars of expertise:

Holistic Design and Engineering.
Our process begins with a deep dive into both brand identity and technical reality. We don't just create aesthetically pleasing bottle shapes; we engineer them for peak performance. Our team balances ergonomics and consumer appeal with strict technical feasibility, ensuring that the transition from a 3D-printed prototype to a mass-produced container is seamless.

Sustainability through Advanced Lightweighting.
In an era where environmental impact is paramount, SIPA's specialized expertise in lightweighting is a critical asset. We work to reduce PET weight to the absolute minimum, helping our customers lower material costs and shrink their carbon footprints. Crucially, we achieve this without ever compromising the structural integrity or the shelf-life performance of the bottle.

Scientific Validation in our Laboratories.
Quality is never left to chance. Our internal laboratories conduct rigorous physical and mechanical analyses on both preforms and bottles. By performing these tests in-house, we can immediately validate designs against global quality standards, ensuring that every container can withstand the pressures of the supply chain.

Precision in Preform and Mold Optimization.
One of SIPA's strongest competitive edges is our deep technical consulting regarding material distribution. By optimizing preform and mold geometries internally, we ensure that material is placed exactly where it is needed. This precision is vital for complex, non-standard shapes and is the key to maintaining efficiency during high-speed production.

Final Industrial Validation: The Pilot Plant .
To bridge the final gap between prototyping and full-scale manufacturing, we offer dedicated Pilot Plant services. Here, we produce small batches of actual PET samples using pilot molds. This allows our customers to hold the final product in their hands and validate the industrial process under real-world conditions before a single production mold is even cut.

05

SUSTAINABILITY

– Technologies and actions for recycling in a view of circular economy.

From Pellets to Pallets: how SIPA minimizes resource consumption across the full production cycle

By the SIPA Engineering & Sustainability Team

In 2026, the global beverage industry faces a "perfect storm" of economic pressures. As geopolitical volatility continues to impact oil and gas availability, energy costs have become a primary driver of operational survival rather than just a balance sheet line item. For preform and bottle producers, the equation is clear: the most profitable kilowatt-hour is the one you never consume.

At SIPA, we have anticipated this shift by embedding sustainability into the DNA of every machine we build. From the first pellet of resin to the final pallet of finished product, our technology is engineered to minimize the use of energy, water, oil, and compressed air, ensuring that your production remains resilient in an unpredictable world.

Preform production: decoupling growth from carbon

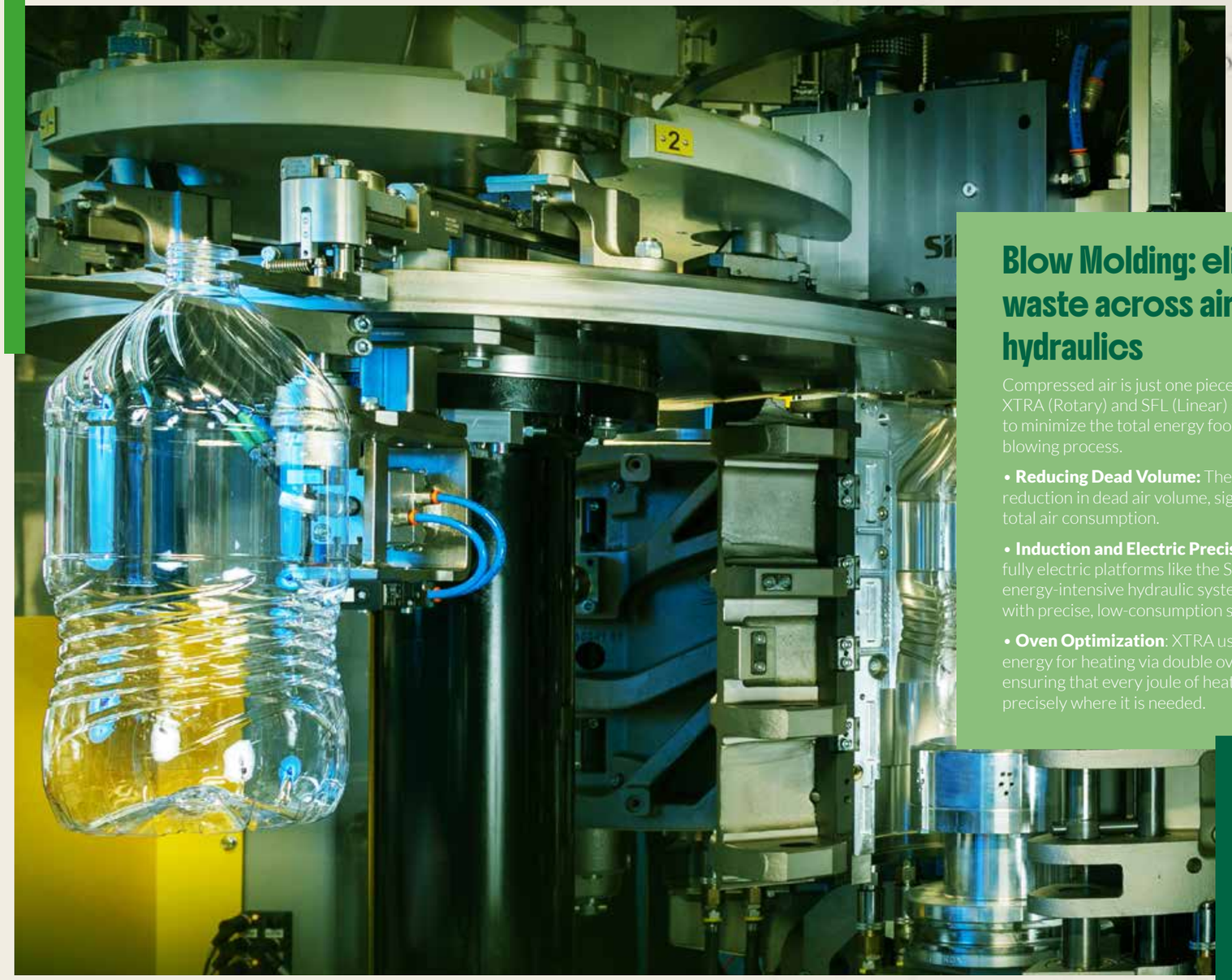
The **XFORM** platform represents the front line of energy defense. In a market where resin prices are often tied to crude oil volatility, reducing processing costs is vital.

- **Extreme Energy Efficiency**: XFORM delivers consumption as low as **190~Wh/kg**
- **Kinetic Recovery**: Our **KERS (Kinetic Energy Recovery System)** recaptures energy during mechanical movements, smoothing out power peaks and reducing stress on factory infrastructure.
- **Resource Circularity**: XFORM can process up to **100% rPET pellets** without standard modifications, while high-injection pressure allows for **ultrathin preform walls**, directly reducing the amount of raw material required per unit.

ECS SP: High-Efficiency Injection Stretch Blow Molding

For specialized production of high-quality containers, the ECS SP series offers a hybrid approach to resource conservation. These compact systems are engineered to minimize operational costs while maximizing precision:

- **Significant Power Reduction**: Thanks to a hybrid configuration using **servo-driven motors** and optimized hydraulic circuits, actual power consumption is typically only **25% to 35% of the rated power**.
- **“Clean Tech” Water & Oil Protection**: The system is designed to be **lubrication-free** in critical areas, eliminating the risk of oil contamination and reducing the need for intensive water-based cleaning or wastewater treatment.
- **Air and Energy Precision:** Machine movements and **primary air flow** can be independently adjusted via the HMI for each cavity, ensuring that compressed air is used with maximum efficiency to achieve the best material distribution.
- **Compact Footprint:** The machine’s space-saving dimensions allow for easier factory integration and even shipment within a standard **40-foot container**, reducing the carbon footprint of logistics and installation.



Blow Molding: eliminating waste across air, heat, and hydraulics

Compressed air is just one piece of the puzzle. Our XTRA (Rotary) and SFL (Linear) series are designed to minimize the total energy footprint of the blowing process.

- **Reducing Dead Volume:** The SFL achieves a 30% reduction in dead air volume, significantly lowering total air consumption.
- **Induction and Electric Precision:** By utilizing fully electric platforms like the SFL, we eliminate energy-intensive hydraulic systems, replacing them with precise, low-consumption servo-motion.
- **Oven Optimization**: XTRA uses up to 25% less energy for heating via double oven ventilation, ensuring that every joule of heat is directed precisely where it is needed.

SINCRO BLOC & SINCRO TRIBLOC

REDEFINING SPACE, ENERGY, AND WATER CONSERVATION

SINCRO BLOC

Our Sincro Bloc integrates blowing, filling, and capping into a single, seamless environment.

- **The End of Air Conveyors:** By eliminating air conveyors, we remove a massive energy drain and the need for costly filtration maintenance.
- **Water Conservation:** Sincro Bloc removes the need for a separate rinser, drastically cutting water consumption and wastewater treatment needs.
- **Gas Management**: In our filling technology, Flextronic reduces CO_{2} consumption by 10% and minimizes product loss to <0.1%.

SINCRO TRIBLOC

For even greater efficiency, the Sincro Tribloc incorporates the labeling phase directly after the blowing process and before filling. This ultra-compact integrated system takes resource optimization even further:

- **Minimizing Footprint:** By housing the labeling station within the synchronized block, the Sincro Tribloc drastically reduces the total floor area required compared to traditional layouts.
- **Total Elimination of Air Conveyors**: Moving the labeller immediately after blowing removes the need for air conveyors between these two critical phases, further slashing energy consumption.
- **Compact Integration:**This setup creates a highly streamlined production flow, offering a single, unified solution for blowing, labeling, filling, and capping with zero logistical gaps.

End-of-Line: a green finish

Sustainability doesn't stop at the bottle. Even at the palletizing stage, our **Genius** and **Robby** systems prioritize a "Green Approach."

- **Oil-Free Performance:** Our systems utilize **lubrication-free transmissions**, reducing chemical use and maintenance downtime.
- **Energy-Conscious Motion:** State-of-the-art electronic controls ensure that robots and palletizers operate with maximum precision, moving only when necessary to minimize their electrical footprint.

The Bottom Line

In a world of limited oil and gas, efficiency is no longer an "option"—it is your competitive advantage. SIPA's integrated range provides the tools to deliver high-quality containers while shielding your operations from the rising tide of resource costs.

Are you ready to optimize your line? SIPA is here to help you navigate the future, one saved kilowatt at a time.

SIPA

BY YOUR SIDE BEYOND THE LIMITS

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