SFL EVO The latest generation

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CONTAINER PRODUCTION

SIPΛ

SFL EVO MEANS **EVOLUTION**

The the new linear blowmoulder that anticipates the future

SIPA's state-of-the-art technology shifts the boundaries of linear blowmoulder evolution and presents the SFL EVO range, offering maximum flexibility combined with increased output. SFL EVO is the new reference point for the sector, designed with new technical features to provide customers with an extremely broad range of packaging solutions for every application.

SFL EVO is yet another challenge that has been won by SIPA in favour of the environment, for a more considered use of plastic in a circular manner. That is because this innovative technology allows the use of recycled materials such as rPET and Tritan, a resin that allows the container to be washed at high temperatures, making it re-usable. All this, without compromising the mechanical or aesthetic qualities of the container.

With SFL EVO, SIPA confirms its position as technological leader in the sector, and a certainty in the world of PET packaging.

The latest model in the new generation of linear blowmoulder systems is born

SFL EVO completes the range of new generation linear stretchblowmoulder systems introduced by SIPA in 2017. This evolution shows numerous technological developments in terms of speed, quality, versatility, capacity, energy efficiency and overall sustainability. Together with the low maintenance costs, all these innovations make SFL EVO truly a "best in class" among linear systems.

A revolutionary technology with the lowest total cost of ownership (TCO) on the market, branded SIPA.





SFL EVO machine range

Base Model	Machine Model	Cavities	Max bottle Size (litre)	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max Neck Finish (mm)	Max Commercial Productivity (bph)	Max Bottle - Water - Productivity (bph)
	SFL 4/5	5	1.5	Ø96 x H350	106	38	10,000	8,800
SFL EVO 4	SFL 4/4	4	3	Ø120 x H350	130	48	8,000	5,600
	SFL 4/4 XL	4	3	Ø120 x H420	130	48	7,200	5,600
SFL EVO 4 XL	SFL 4/3 XL	3	5	Ø163 x H420	173	48	5,400	3,750
	SFL 4/2 XL	2	12	Ø220 x H420	260	48	3,600	1,800
	SFL 6/8	8	1.5	Ø90 x H350	100	38	16,000	13,200
SFL EVO 6	SFL 6/7	7	2	Ø104 x H350	114	38	14,000	11,300
	SFL 6/6	6	3	Ø120 x H350	130	48	12,000	8,400
	SFL 6/6 XL	6	3	Ø120 x H420	130	48	10,200	8,100
	SFL 6/5 XL	5	4	Ø150 x H420	160	48	8,500	6,500
SFL EVO 6 XL	SFL 6/4 XL	4	5	Ø185 x H420	195	48	6,800	5,200
	SFL 6/3 XL	3	12	Ø220 x H420	260	48	5,100	3,750
SFL EVO 6 XL	SFL 6/6 XXL	6	5	Ø163 x H420	173	48	8,400	7,200
	SFL 6/5 XXL	5	6	Ø185 x H420	208	48	7,000	6,000
	SFL 6/4 XXL	4	12	Ø220 x H420	260	48	5,600	3,400





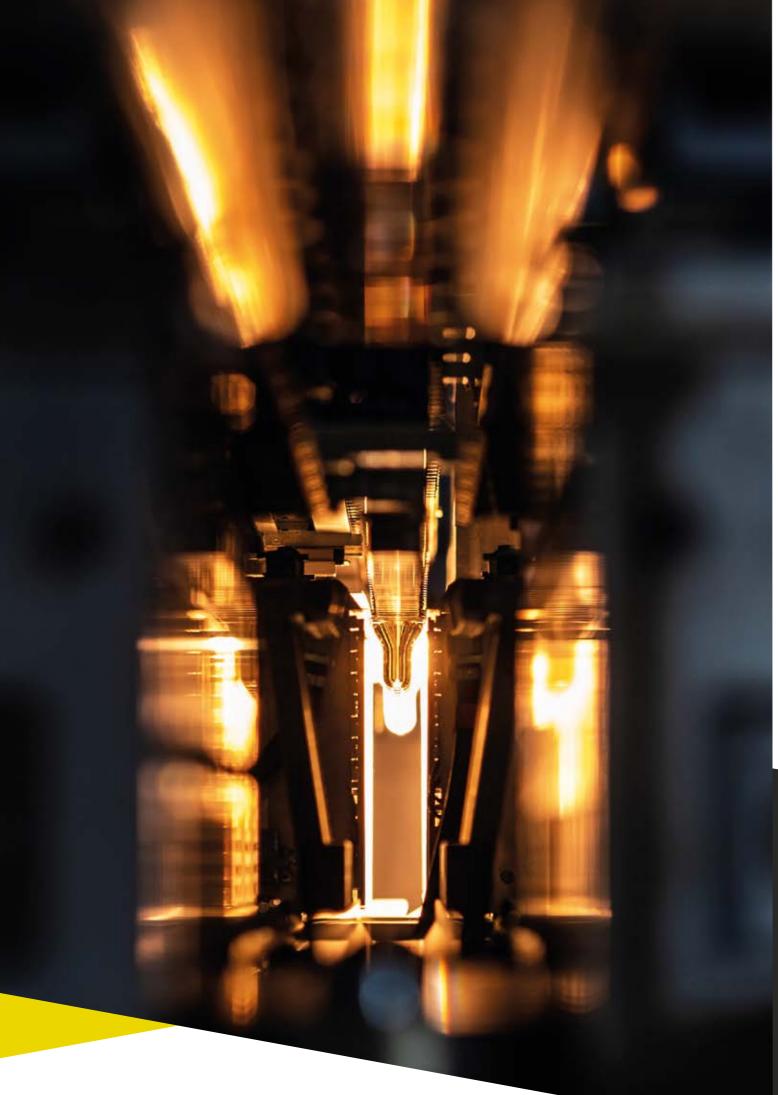
Base Model	Machine Model	Cavities	Max bottle Size (litre)	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max Neck Finish (mm)	Max Commercial Productivity (bph)	Max Bottle - Water - Productivity (bph)
SFL 2	SFL 2/3	3	15	Ø240 x H560	265	70 ^	3,000	1,500
	SFL 2/2	2	20	Ø360 x H560	400	88 ^	2,000	1,000



	Machine Model	Cavities	Max bottle Size (litre)	
SFL 1 XL	SFL 1 XL	1	25	Ø305 x H



Base Model	Machine Model	Cavities	Size (lifre)	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)		Max Commercial Productivity (bph)	Max Bottle - Water - Productivity (bph)
	SFL 4/4 WM	4	3	Ø120 x H350	130	90	6,000	4,000
SFL WM	SFL 4/3 WM	3	5	Ø163 x H420	173	120	4,500	3,000
	SFL 4/2 WM	2	12	Ø220 x H420	120	120	3,000	1,500



INNOVATIVE TECHNOLOGY, GREAT PERFORMANCE What are the new features of SFL EVO?

SFL EVO produces containers with the **maximum added value** and the **best possible TCO**, a guarantee for your business.

This top-of-the-range linear blowmoulders is designed to operate from 1 to 8 blowing cavities and reaches a maximum productivity of **2,000 bottles hour/cavity**, a figure higher than any other system on the market, with the lowest ever energy consumption. Production of the 1 litre size is even faster (16,000 bottles/hour), as is that of the 5 litre size: up to 7,500 bottles/hour.



Important new features include a smart clamping unit with "dynamic stroke". Servo drives make it possible for the user to choose from three different strokes, so they can optimize output. SIPA has also further simplified the **mould changeover** procedures and has optimised the **blowing blocks** to achieve a 30% decrease in dead air volume and consequently a reduction in total air consumption.



Container quality control: SFL EVO can integrate camera systems to check the integrity of incoming preforms and outgoing containers, managing them all in a single process. **Energy efficiency**: the other great strong point of the platform, which is fully electric, is the low power consumption.

SFL EVO can process preforms using **rPET** (post consumer PET) including those produced with XTREME RENEW system (100% rPET flakes). It is also the right choice to deal with the proliferation of storage units (SKU), small production runs and customisation of packaging.

SFL EVO is a **stable**, **safe**, **state-of-the-art** platform, that can be integrated with **additional kits** to further improve its **flexibility** and increase your own product portfolio, but above all it is an **incomparable competitive asset** to guarantee constant growth on the PET packaging market.

THE FIVE AREAS OF INNOVATION

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SUPERIOR

Superior

productivity

& performance

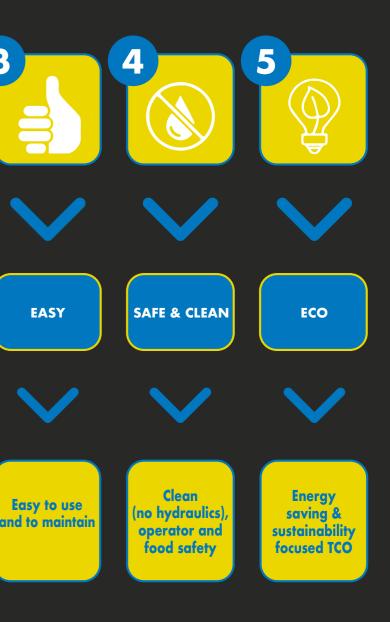
FLEXIBLE

PACKAGING

Extreme

stretching

capabilities



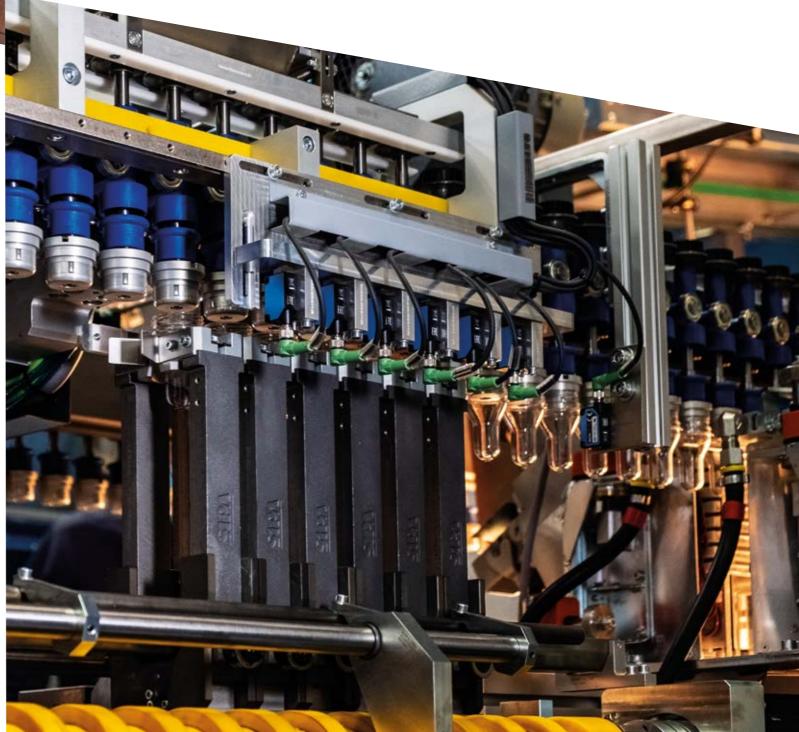


1. SUPER-FLEXIBLE **CONTRACKAGING**

Weight: from 5g to 999g Preform thickness: from 1mm to 10mm Neck: from 18mm to 130mm **Speed**: from 50 bhc to 2,000 bhc Stretch ratio: from 1x to 20x Asymmetrical shape: up to 3x ovalisation Handle: numerous types including in-mould handle and pull-out handle Resin: PET, rPET, PP, PS, PE, TRITAN, multi-layer, Preform in Preform, also "Resin-in-Resin" **Colours**: Clear, recycled, TiO₂, opaque, multi-layer For food: hot-fill, pasteurizable, LowAcid / HighAcid aseptic, ESL, HPP



Up to **2,000 bhc** SFL EVO 6/8 16,000 bph New design for the press and new opening for the dedicated servo-driven gripper Maximised competitivity even with several SKUs Optimisation of the oven and blowing air circuit Lower consumption in heating and blowing









4. SAFE FOR THE OPERATOR AND FOR THE CONTENTS

Fully electric system **Complies with standards** for EU, USA and Canada Complies with LOTO (Lock Out - Tag Out) Noise generated < 85 dB Lubrication points under the neck level to avoid contamination



Excellent user experience: rapid installation with quick, simple learning New HMI software, user friendly and intuitive Full diagnostics, remote support, widely available spare parts Integrated, assisted maintenance 20 minute mould changeover mode







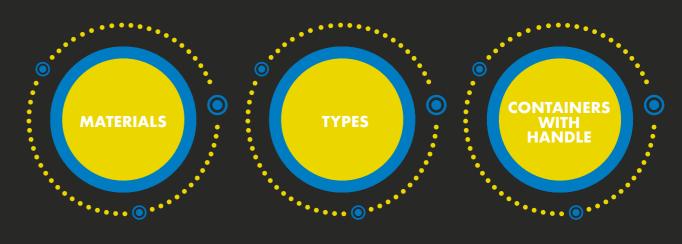


Optimised process for a saving on the bottle weight Low power consumption and reduction in CO₂ Support for the circular economy thanks to SIPA's experience with rPET 100% Designed for recycling with AwarePET Extreme lightness and durability



APPLICATIONS Materials and container types

SFL EVO is able to produce numerous types of container: round, oval, oriented neck, long neck, wide mouth, for hot fill, with handle (in-mould or post-mould), re-usable containers with thick walls, collapsible containers with extremely thin walls and much, much more. On XXL models it is also possible to produce disposable beer kegs.



PET rPET OPP PLA PE PS Tritan Preform in Preform Multi-layer Standard and customised Light Weights Hot fill Pasteurisable Ultra-Clean ESL, Aseptic HPP Large formats Oval and asymmetrical Wide mouth (jars)

Light barrier Gas barrier Humidity barrier Active packaging Ti O₂

Opaque bottles

With grip Handle on neck Handle after blowing Blowing with handle (positioning via robot inside the mould)





THE PACKAGING FOR TOMORROW A smart and digital platform



The future of linear blowmoulders with SFL EVO.

SFL EVO is designed to exploit ECHO, SIPA's new customer lounge providing full on-line remote support, immediate collection of operational data (making it easy to monitor performance, even on mobile devices), digital manuals and spare parts navigation, tracking of service requests, interactions, and shipments. A complete digital evolution as well.

SFL EVO can be installed in combination with a SIPA filler, forming the Sincro Bloc L monoblock. Connection between blowing and filling takes place thanks to an integrated handling system for the blown bottles. A winning combination.



STATE-OF-THE-ART TECHNOLOGY World leader in PET packaging innovation



design, production and sale of PET packaging technologies, and is a market pioneer in terms of evolution and vision.

Thanks to its extensive experience in the development and optimisation of bottles and preforms, SIPA continuously innovate its systems to offer customers the preform and container best suited to their specific needs, from the design and supply of samples all the way to quality certification.

SIPA's prototypes laboratory is equipped with one cavity single stage and two-stage machines, and is also fully equipped to carry out all the tests on preforms and containers that are normally required, including: dimensional and mechanical analysis, analysis of chemical and physical properties (for example AA, gas permeability) as well as filling simulations. SIPA is able to guarantee functionality and optimisation of the packaging as a whole: preform, container, seal, label, packing and pallet forming. Over recent years the company has pushed more and more to develop sustainable solutions for the production of rPET plastic packaging, with the continual introduction of innovations aimed at minimising environmental impact and supporting the circular economy.



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