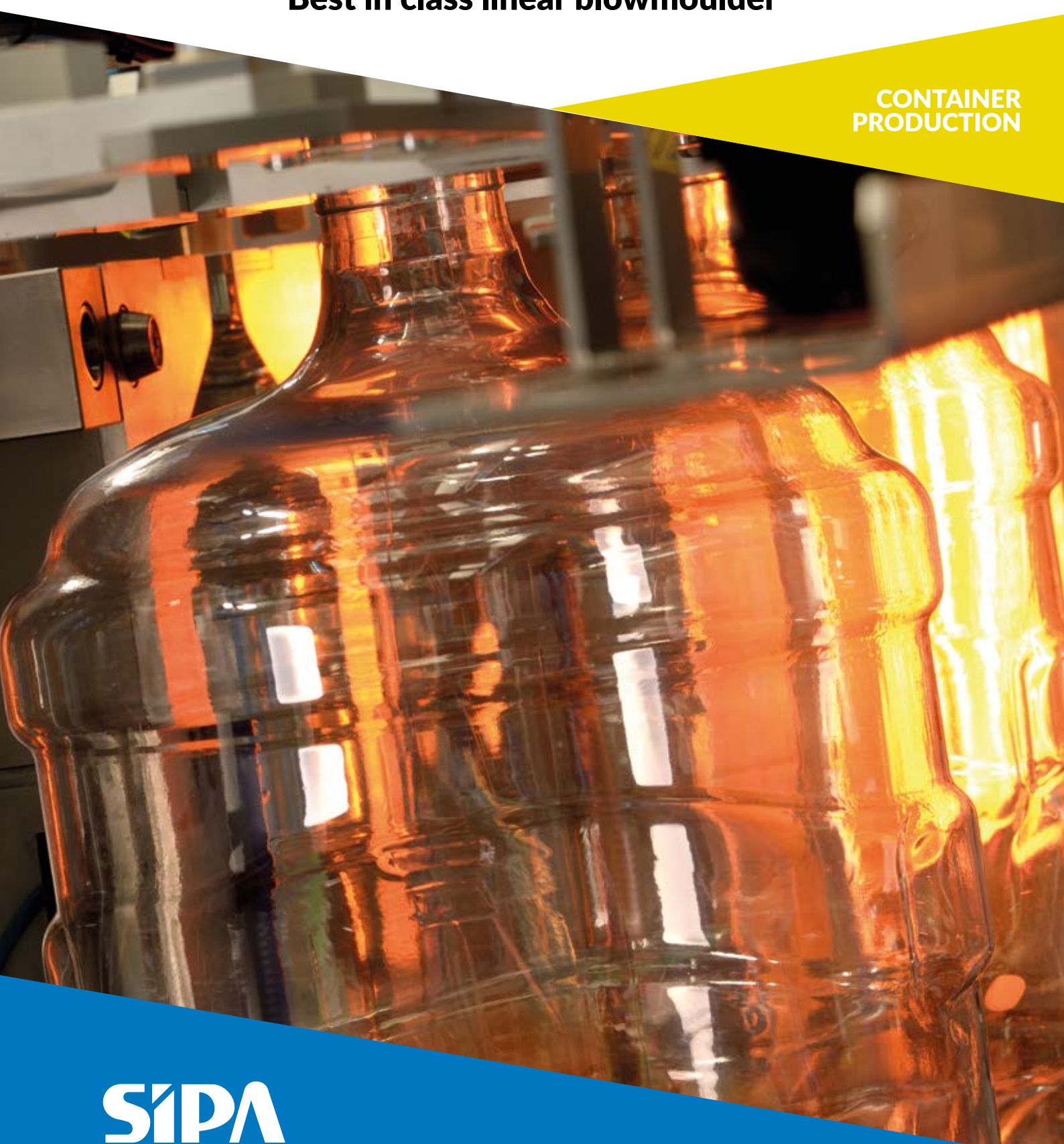




Best in class linear blowmoulder

**CONTAINER
PRODUCTION**



SIPA

SFL MEANS FLEXIBILITY

Linear blowmolders
that anticipate
the future



SIPA's state-of-the-art technology expands the boundaries of linear blowmolders, offering maximum flexibility combined with greater output and overall performance.

SFL is the 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 is another challenge won by SIPA in favour of the environment, for a more considered use of plastic in a circular manner.

This innovative technology, actually, allows the use of recycled materials such as rPET or biobased PET or other naturally sourced polymers as well as 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.

SFL is the technological leader in the sector, and a certainty in the world of PET packaging.

SFL: SIMPLY THE BEST IN CLASS LINEAR BLOWMOULDER SYSTEMS

SFL, born in 2005 and upgraded in 2017, shows numerous technological developments in terms of speed, quality, versatility, capacity, energy efficiency, low maintenance cost and overall sustainability. All these unique features make SFL truly a “best in class” among linear systems, with **the lowest total cost of ownership (TCO) on the market**.

SIPA rebranded the range as follows:

SFL FLEX with 1 or 2 cavities is for small batch production;
SFL DYNAMIC is for large bottles, but also for oval and custom shapes;
SFL PERFORMANCE is for higher cavity counts and production;
SFL BIG is for medium/high productivity of containers up to 12 l;
SFL MAXI is for the really big containers up to 30 l;
SFL WM is for wide-mouth jars production.



INNOVATIVE TECHNOLOGY, GREAT PERFORMANCE

What are the features of SFL?

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

Energy efficiency: the other great strong point of the platform, which is fully electric, is the low power consumption.

rPET bottles: SFL can process preforms made in rPET (post consumer PET) including those produced with XTREME RENEW system (100% rPET flakes).

Additional kits: to further improve flexibility and increase your own product portfolio, SFL can integrate different kits: oval-preferential heating, neck orientation, hot-fill, handle, tall neck, special resins kits.

Smart clamping unit: a “dynamic stroke” makes it possible to choose from different strokes to optimize the output.

Mould changeover: simplified procedures for format change to guarantee faster and simpler operations.

Optimised blowing blocks: 30% decrease in dead air volume and major reduction in total air consumption.

Container quality control: SFL can integrate camera systems to check the integrity of incoming preforms and outgoing containers, managing them all in a single process.

THE FIVE AREAS OF INNOVATION





2. HIGH PERFORMANCE



SFL can be installed in combination with a SIPA filler, forming the Sincro Bloc L monoblock.

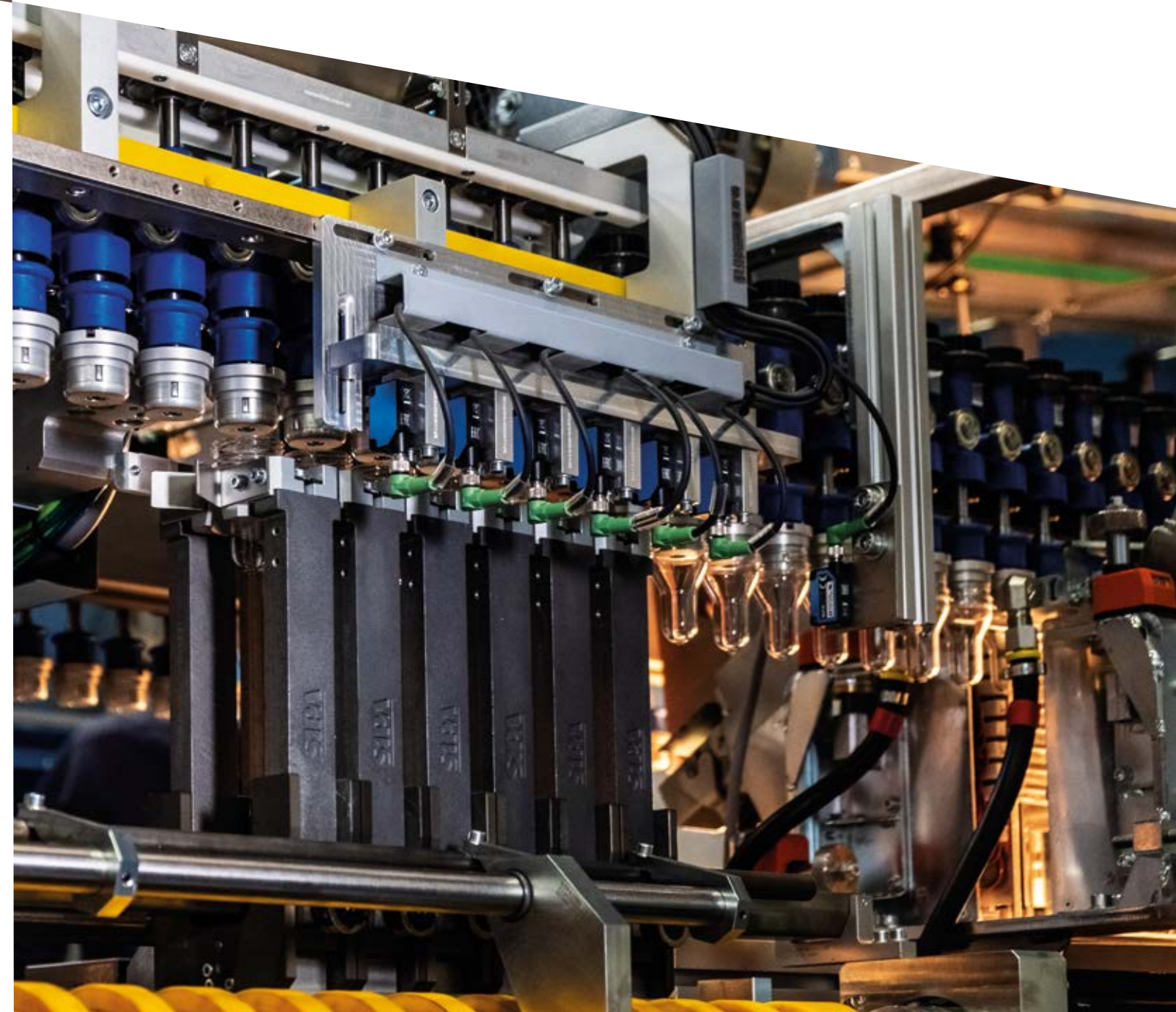
Highest output: up to **2,000 bhc** which means **16,000 bph** on SFL PERFORMANCE

New design for the press and **new opening** for the dedicated servo-driven gripper

Maximised competitiveness even with several SKUs

Optimisation of the oven and blowing air circuit

Lower consumption in heating and blowing



1. SUPER-FLEXIBLE PACKAGING



- Weight:** from 5 g to 999 g
Extreme stretch ratio and asymmetrical shape (up to 3x)
- Preform thickness:** from 1 mm to 10 mm
- Neck:** from 18 mm to 130 mm
- Handle:** Numerous types including in-mould handle and post-mould handle
- Resin:** PET, rPET, biobased, PP, PS, PE, Tritan, multi-layer, Preform in Preform, "Resin-in-Resin"
- Colours:** Clear, recycled, TiO₂, opaque, multi-layer
- Applications:** Cold-fill, Hot-fill, Refillable, Pasteurizable, Low-Acid aseptic, ESL, HPP



4. SAFE FOR THE OPERATOR AND FOR THE CONTENTS



Fully electric system

Oil free system, even for Heat-set

Electro-mechanical locking device with escape release

Complies with standards for EU, USA and Canada

Complies with LOTO (Lock Out - Tag Out)

Noise generated < 85 dB

3. EASY TO USE



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

It is designed to exploit **ECHO, SIPA's customer lounge** providing full on-line remote support, immediate collection of operational data, digital manuals and spare parts navigation, tracking of service requests, interactions, and shipments.



5. ECO-ORIENTED



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 AwarPET**

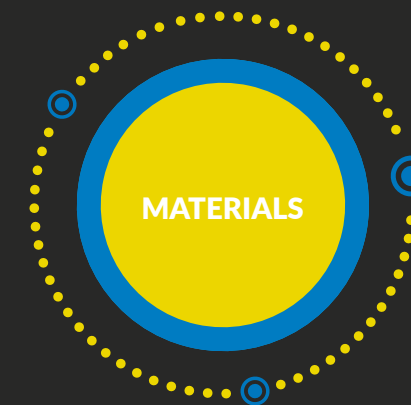
Extreme **lightness and durability**



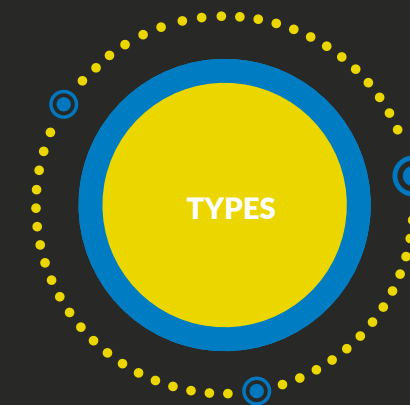
APPLICATIONS

Materials and container types

SFL 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 MAXI 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)

FROM STANDARD TO CUSTOM PACKAGING

FROM 200
TO 16,000
BPH

SIPA



SFL WIDE MACHINE RANGE

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**, with **the lowest ever energy consumption in the market**.
Production of the 1 litre size is even faster (16,000 bottles/hour), as is that of the 5 litre size: up to 7,800 bottles/hour.

Machine	Cavities	Max bottle format	Max. Neck Finish	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max. Commercial Productivity (bph)	Max Bottle -Water- Productivity (bph)
SFL PERFORMANCE 8	8	1	38	Ø90 x H350	100	16,000	13,200
SFL PERFORMANCE 7	7	2	38	Ø104 x H350	114	14,000	11,300
SFL PERFORMANCE 6	6	3	48	Ø120 x H350	130	12,000	8,400
SFL PERFORMANCE 6H	6	3	48	Ø120 x H420	130	9,900	8,100
SFL PERFORMANCE 5H	5	4	48	Ø150 x H420	160	8,500	6,500
SFL PERFORMANCE 4H	4	5	48	Ø185 x H420	195	6,600	5,200
SFL PERFORMANCE 3H	3	12	48	Ø220 x H420	260	5,100	3,750
SFL DYNAMIC 5	5	1,5	38	Ø96 x H350	106	10,000	8,800
SFL DYNAMIC 4	4	3	48	Ø120 x H350	130	8,000	5,600
SFL DYNAMIC 4H	4	3	48	Ø120 x H420	130	7,600	5,600
SFL DYNAMIC 3H	3	5	48	Ø163 x H420	173	5,400	3,750
SFL DYNAMIC 2H	2	12	48	Ø220 x H420	260	3,600	1,800
SFL FLEX 2	2	3	48	Ø120 x H370	173	4,000	3,000
SFL FLEX 1	1	5	48	Ø163 x H370	-	2,000	1,200



Machine	Cavities	Max bottle format	Max. Neck Finish	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max. Commercial Productivity (bph)	Max Bottle -Water- Productivity (bph)
SFL BIG 6	6	5	48	Ø163 x H420	173	8,400	7,200
SFL BIG 5	5	6	48	Ø185 x H420	208	7,000	6,000
SFL BIG 4	4	12	48	Ø220 x H420	260	5,200	3,400



Machine	Cavities	Max bottle format	Max. Neck Finish	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max. Commercial Productivity (bph)	Max Bottle -Water- Productivity (bph)
SFL MAXI 3	3	15	55	Ø240 x H560	70	3,000	1,500
SFL MAXI 2	2	20	80/55	Ø360 x H560	88	2,000	1,000
SFL MAXI 1	1	30	93	Ø305 x H580	-	1,000	500



Machine	Cavities	Max bottle format	Max. Neck Finish	Max bottle Dimension Diameter x Height (mm)	Blow Pitch (mm)	Max. Commercial Productivity (bph)	Max Bottle -Water- Productivity (bph)
SFL WM 4	4	3	90	Ø120 x H350	90	6,000	4,000
SFL WM 3	3	5	120	Ø163 x H420	120	4,500	3,000
SFL WM 2	2	12	120	Ø220 x H420	120	3,000	1,500



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