



The One-Stop Solution  
for your Packaging

FROM PELLET  
TO PALLET







## PACKAGING DESIGN AND ENGINEERING

Thanks to its deep experience in preform and bottle design, SIPA has become the only supplier that can boast a know-how that collects together, under a single roof, all of the following elements:

### Injection expertise

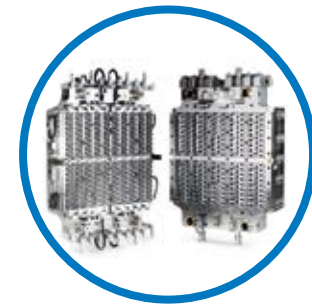
- Preform design and engineering
- Sustainable preform studies
- Preform prototyping and testing

### Blowing expertise

- Design: attractive shapes, new concepts
- Packaging engineering to obtain the best performance
- Science of sustainable packaging
- Structural calculations and virtual simulations
- Container prototyping and Lab performance testing

### Blowing moulds

Moulds for the beverage, food and consumer goods industry for any application and shape of container with a wide variety of engravings and decorations.



## TOOLING SOLUTIONS

SIPA provides preform tooling for proprietary and legacy equipment with up to 200 cavities, becoming one of the largest supplier with several manufacturing facilities and conversion/refurbishing hubs.

- **Preform tooling benefit** to support optimum performance:
  - wear resistant coating to achieve a longer mould life
  - optimized cooling layout to support fast cycle times and reduce energy costs
  - patented hot runner technology to extend maintenance intervals to new records

## THE 4 PILARS FOR A SUCCESSFUL PACKAGING

## PREFORMS AND CONTAINERS PRODUCTION SYSTEMS

SIPA provides the widest range of preforms and containers manufacturing solutions on the market.

Our **PET preforms manufacturing range** now comprises **two major families**, each with its own distinctive technology, for different sectors of the global packaging industry.

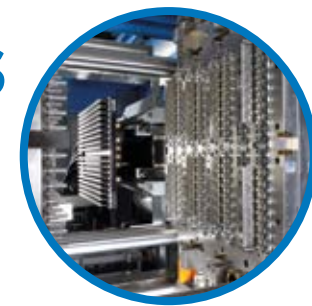
SIPA is the only provider in the market owning the expertise in container manufacturing solutions, both **single-stage and two-stage**. A technological partner capable to meet specific customer needs offering appropriate and innovative solutions. Always considering factors such as container cost and flexibility demand.

## WORLD LEADER IN PET PACKAGING INNOVATION

SIPA is the only supplier on the market capable of offering **you a full range of skills specific to the entire process**: from the design and production of preforms, moulds and containers, up to the realization of complete lines, for food and beverage, chemical products, cosmetics, detergents and pharmaceutical sectors. We are the ideal partner to harness your imagination and bring your projects **from pellet to pallet**.

## CUSTOMIZED COMPLETE LINES

SIPA was born as an engineering company to provide integrated systems for flexible automation for a wide range of industries. Since then, our company has acquired considerable experience as a process/technology integrator, offering today **unique tailor-made and high efficiency bottling lines**, based on three main values: engineering, standardisation and customisation. Unmatched packaging know-how together with flexible solutions are the added values that SIPA brings to this fast evolving market.





# PREFORM SYSTEMS: SETTING A NEW STANDARD IN PREFORM MANUFACTURING

SIPA's offer comprises two families of machines for preform production, each of which has its own unique technology:

- **XFORM** platform: the right solution for highly cost and energy efficient production of PET preforms by conventional injection moulding capable of running moulds with up to 200 cavities.
- **XTREME** platform: a revolutionary injection-compression moulding system for production of lightweight preforms with gentle material treatment and high flexibility. It is also an open system for upstream and downstream integration.



## PREFORMS PET, Post consumer resin (flakes and granules)

- Lightweight (mineral water, edible oil)
- Innovative neck finish and base design for extreme lightweighting
- Thick-wall (carbonated soft drinks)
- Hot fill
- RefPET
- Wide mouth



MODEL	Cavitation [min - max]	Max output [p/h]	Preform thread [min-max]	Z diameter [min-max]	Body diameter [min-max]
XFORM 500	24 - 200	up to 160,000	28 mm - 80 mm	33 mm - 82 mm	26 mm - 78 mm
XFORM 350	16 - 128	up to 102,400	30 mm - 80 mm	34 mm - 82 mm	29 mm - 78 mm
XFORM 250	8 - 96	up to 76,800	30 mm - 80 mm	34 mm - 82 mm	29 mm - 78 mm

MODEL	Cavitation	Max output [P/hour]	Min preform base thickness [mm]	Max preform weight [g]	Max preform Length [mm]
XTREME	96	up to 70,000	0.95	60	150
XTREME	72	up to 57,600	0.95	60	150

# ONE-STEP SOLUTIONS: AN ENDLESS RANGE OF PRODUCTION POSSIBILITIES WITH SINGLE-STAGE

**Single-stage ISMB**, from the resin to the bottle: this is the most suitable platform when producing specialty and tailor-made containers. These systems are extremely versatile and enable **quick changeovers**, accept **legacy moulds** and are also characterized by their **compact layouts** and high **energy efficiency**, producing a wide **variety of different sizes, threads and shapes**.



## APPLICATIONS

- Mineral water
- Soft drinks
- Juices, isotonic
- Teas, coffees
- Milk and dairy products
- Edible oil
- Beer and liquors
- Paste and semi-paste products
- Salad dressings
- Cosmetics and detergents
- Pharmaceuticals

## CONTAINERS

### PET, OPP, PEN, PLA, Recycled PET, Regrind PET

- Lightweight, standard and tailor-made
- Heat set and pasteurizable
- Aseptic and ultra-clean
- Wide mouth
- Oval and asymmetrical
- Light barrier
- Gas and oxygen barrier
- Moisture barrier
- Active packaging
- Retortable



MODEL	Injection cavities	Blowing cavities	Max bottle size [L]	Max neck diameter [mm]	Max output [b/h]
ECS SP 80	1 - 16	1 - 16	12.5	130	7,200
ECS SP 25	1 - 10	1 - 10	3.5	100	4,500
ECS FX 20/80 EVO	80	40	1.0	38	36,000
ECS FX 20/64 EVO	64	32	2.0	48	28,800
ECS FX 20/48 EVO	48	24	3.0	53	21,600
ECS FX 20/48 EVO WM	48	24	3.0	73	13,500
ECS FX 20/40 EVO WM	40	20	3.0	89	11,250
ECS FX 20/32 EVO WM	32	16	3.0	90	9,000



# ROTARY BLOWING SYSTEMS: MAXIMUM PERFORMANCE WITHOUT COMPROMISE

XTRA is a concentrate of technology, but most important of benefits: user friendly system with the highest bhc output in the industry, the widest active process angle, unmatched bottle quality regardless preform material (rPET, bio-based resins), energy saving across the board, extreme user-friendliness, plus a totally open system. This perfect combination of performance, speed, quality levels and saving leads to a reduction in Total Cost of Ownership.

## XTRA



### CONTAINERS

#### PET, OPP, Multilayer

- Lightweight, standard and tailor-made
- Heat set and pasteurizable
- Ultra-clean
- Light barrier
- Gas and oxygen barrier
- Moisture barrier
- Active packaging

### APPLICATIONS

- Mineral water
- Soft drinks
- Juices, isotonic
- Teas, coffees
- Milk and dairy products
- Sensitive products
- Edible oil
- Beer and liquors



MODEL	Blowing cavities	Max size [L]	Max output [b/h]
XTRA 24	24	3.5	65,000
XTRA 20	20	3.5	54,000
XTRA 16	16	3.5	45,000
XTRA 14	14	3.5	40,000
XTRA 12	12	3.5	34,000
XTRA 10	10	3.5	28,000
XTRA 8	8	3.5	22,000
XTRA 6	6	3.5	17,000

# LINEAR BLOWING SYSTEMS: FLEXIBILITY AT THE HIGHEST LEVELS

**Linear stretch-blowmoulding systems:** the most flexible system and user-friendly platform in the market for the production of the larger variety of containers (standard, heat set, refillable, oval, large sizes and wide mouth). A revolutionary technology with the lowest total cost of ownership (TCO) and the highest bottles hour/cavity output than any other system.

## SFL



### CONTAINERS

#### PET, OPP, Multilayer

- Lightweight, standard and tailor-made
- Heat set and pasteurizable
- Oval and asymmetrical
- Large sizes (up to 30 liters)
- Wide mouth
- Light barrier
- Gas and oxygen barrier
- Moisture barrier
- Active packaging

### APPLICATIONS

- Mineral water
- Soft drinks
- Juices, isotonic
- Teas, coffees
- Milk and dairy products
- Edible oil
- Beer and liquors
- Salad dressings
- Cosmetics and detergents
- Food



MODEL	Blowing cavities	Max size [L]	Max output [b/h]
SFL PERFORMANCE	6 - 7 - 8	3 - 2 - 1	12,000 - 14,000 - 16,000
SFL DYNAMIC	4 - 5	3 - 1.5	8,000 - 10,000
SFL FLEX	1 - 2	5 - 3	2,000 - 4,000
SFL PERFORMANCE H	3 - 4 - 5 - 6	12 - 5 - 4 - 3	5,100 - 6,600 - 8,500 - 9,900
SFL DYNAMIC H	2 - 3 - 4	12 - 5 - 3	3,600 - 5,400 - 7,600
SFL BIG	4 - 5 - 6	12 - 6 - 5	5,200 - 7,000 - 8,400
SFL MAXI	1 - 2 - 3	30 - 20 - 15	1,000 - 2,000 - 3,000
SFL WM	2 - 3 - 4	12 - 5 - 3	3,000 - 4,500 - 6,000



# FILLING & PROCESS: FLEXIBLE SOLUTIONS

## FILLING BLOCS

**Wide and versatile range of rinsing, filling and capping monoblocs** (up to 180 valves), offering the highest level of hygiene standards, wide range of sanitation levels and significant running costs reduction for still and carbonated water, soft drinks, milk, RTD tea, fruit juices and edible oil. Output up to 84,000 bph.



- **FLEXTRONIC** : Flexible electronic volumetric fillers for still or carbonated products, clear or pulpy, hot or cold filling and weight filling.
- **BIGFILL** : Volumetric gravity filling monoblock for large size containers.
- **STILLFILL EVO** : Gravity mechanical filler for still water and not carbonated products.
- **ISOFILL** : Isobaric mechanical filler for CSD, still and carbonated water.
- **ISOTRONIC G** : Electro-pneumatic level filler for carbonated and still products in Glass and PET (one way or refillable) bottles.

- **XFILL**: Innovative configuration with the integration mixer-filler.
- **HOT FILL SOLUTIONS**: fillers for clear or pulpy products, Nitro HF and integration with sacs doser.
- **MULTI PRODUCT LINES**: filling different product in the same line, i.e. CSD/Hot Fill.
- **ULTRA CLEAN**: extremely clean design to fill sensitive products.

## PROCESS AND PRODUCT PREPARATION

High performance and flexible range of product preparation systems. Precision, flexibility, hygienic design, total cost of ownership and maintenance reduction are the main added values.



- **MASSBLEND** : Compact continuous mixing unit for the automatic production of carbonated and no-carbonated beverage with massic control.
- **CARBO MW - CARBO SD** : Continuous degassing and carbonation units for mineral water and CSD.
- **XBLEND** : Continuous multi-component degassing and mixing unit.
- **XTHERM** : Compact pasteurizing plant for the automatic thermal treatment of the finished beverage.
- **VARICLEAN** : Compact CIP sanitizing unit, used to wash all the process unit involved in the foodstuff preparation.

# PACKAGING: CONVENTIONAL AND ROBOTIZED SOLUTIONS

## PALLETIZERS/DEPALLETIZERS

A complete range of **palletizers and depalletizers, both traditional and robotized**, for bottles, jars, cans, cartons, crates and shrink-packs. Robust downstream solutions offering high performance and efficiency to satisfy the most demanding needs of the beverage, food, detergents, chemical and pharmaceutical industries.



- **GENIUS** : A modular and flexible range of fully automatic conventional palletising and depalletising systems, with high and low level feeding.
- **ROBBY PAL** : Robotic palletizing and manipulation systems, extremely flexible and reliable, for a wide range of containers and packaging: layer, row, multihead and loose product handling.
- **ROBBY RACK** : large size container palletiser on racks or pallets...

- **FASTLAYER AND ACTIVE LAYER**: Layer preparation with active pack orientation and arrangement. Innovative alternative to conventional layer preparation requiring a divider and layer formation area with static pack-turning device. They can be integrated upstream of any kind of palletizer or handling solution.

## CARTONING SYSTEMS

Comprehensive range of solutions for different container handling in plastic crates, American-type cartons and wraparound, designed to meet different levels of speed and to cover all production needs, from the simplest to the most complex packaging configurations handled with robotic solutions.



- **SILENT-JOLLY** : Continuous movement conventional case packers equipped with different pick-up heads.
- **ROBBY PACK** : Robotic case packers for handling different type of containers, designed for high-speed lines or to fulfill special packaging requests.
- **FORMEX - INSERT - STICK** : Carton erector, sealer and partition inserter.
- **UNIWRAP** : Wrap-around cartoning machines with continuous movement.



# FLEXIBLE AND CUSTOMIZED COMPLETE LINES: FROM PELLET TO PALLET

SIPA is the only supplier on the market capable of providing customers with **specific know-how for the entire bottling process**, from the design and production of preforms and containers all the way to the creation of turnkey production lines. We overcome customers' challenges shaping solutions for **extremely flexible and highly efficient bottling lines**: by means of engineering activities we are able to design solutions that satisfy our customers' most diverse manufacturing requirements.

**With plant engineering the design is rationalised by combining a number of factors, such as:**

- The containers and products to be handled on the complete line
- Operator's safety and ease of use
- The customer's production daily requirements
- The structural limits of the area in which the line is to be installed
- The cost of the individual components
- Our commitment to respecting the Environment
- System operating flexibility and optimisation of logistic flows
- Reduction of global TCO

## PALLETIZER / DEPALLETIZER

Complete palletising and depalletizing systems both traditional and robotic, for bottles, jars, cans, cartons, plastic crates and packs.

## CARTONING SOLUTIONS

Craters for cartons and plastic crates for every kind of bottles, cans and jars. The range includes carton erectors, carton sealers and partition inserting machines.

## CONVEYORS

Full range of conveying systems with modular elements for every kind of container.

## SINCRO BLOC SOLUTIONS

Integrated blowing and filling/capping systems as well as integrated preforms production, bottle blowing and filling/capping.

## FILLING MONOBLOCS

Complete range of rinsing-filling-capping monoblocs for still and carbonated water, soft drinks, milk, beer, tea, fruit juices and edible oil.

## PRODUCT PREPARATION

Product preparations systems such as carbonators, traditional and automatic mixers with massic control, pasteurisers.

## PREFORM PRODUCTION

Two major families of preform systems, for different sectors of the global packaging industry.

## PACKAGING DESIGN

Preforms and containers design, engineering, sampling and testing.



## CONTAINERS PRODUCTION

Complete range of container production systems: one-stage systems, linear and rotary blowmoulding machines.

## A WIDE VIEW ON PACKAGING CAPABILITIES



Mineral water



Carbonated Beverages



Juice, tea, isotonic



Edible Oil



Milk & Dairy products



Alcoholic Beverages



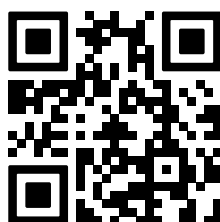
Food products



Non-food products



Specialty products



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