ECS SP

Injection Stretch Blow Molding System



ISBM TECHNOLOGY: THE FOUR STEP PROCESS



1. INJECTION

2. CONDITIONING 3

3. BLOWING

4. DISCHARGE

SIPA ECS SP EXPERIENCE & FLEXIBILITY



YEARS of experience in injection-stretch blowmolding (ISBM) technology. **EXPERTISE** in complete injection tooling designed and manufactured by SIPA.

Injection stretch-blow molding machines (ISBM) models are designed for the production of bottles with volumes as small as 20, 30 and 50 mL, typically used for such products as pharmaceuticals or personal care. They have features that enable quick change-overs between different product configurations, and they are also characterized by their compact layouts and high energy efficiency.







NEW DESIGN of preforms and bottles every year.

ECS SP MAIN FEATURES





1. QUALITY: **A GUARANTEE OF SUCCESS**

SIPA processes and continuous improvement drive performance leadership across all of our industries while ensuring consistent value for our customers.

- Totally made in Italy based on 35 years of experience on ISBM technology. • Very robust system, allows high blowing pressure to achieve the best quality
- on sophisticated shapes.
- "Clean Tech", no risk for oil contamination of bottles. • Gate-less preforms: faster cycle time and better aesthetics, less crystallized area. • More homogeneous melt for higher bottle quality. • Complete injection tooling designed and manufactured by SIPA (360° expertize

- and **one-stop supplier**).







2. FLEXIBILITY: IDEAL FOR EVERY MARKET NEEDS

The ECS SP models, with their versatility can produce containers with a wide range of different sizes, threads and shapes with an optimization on investment.

- Possibility to use legacy molds.
- Wide range of packaging capabilities thanks to one of the biggest shot size capability available in the market in order to produce heavier preforms for bigger size bottles.
- Extremely fast changeover time, thanks to the quick changeover features (~2.5 hours for a complete changeover). The new features also bring additional safety and user-friendliness to operators, especially for some critical operations in the upper part of the machine.

3. EFFICIENCY: ALWAYS THE BEST PERFORMANCE AT YOUR DISPOSAL

The ECS SP series offer high energy efficiency due to the hybrid configuration of the machines.

- Bigger pitch = enhance flexibility and bigger body diameter that allows higher cavitation on similar machines footprint.
- Hybrid configuration: energy efficient.
- Clamping force generated by short stroke hydraulic cylinders:
 - Very low oil quantity
 - Clean containers
 - Reduced consumptions
 - High tonnage blowing press
- Machine movements adjusted by HMI.







4. SAFETY: THE HIGHEST SAFETY STANDARDS FOR YOUR PRODUCTION



SIPA offers the highest level of safety standards in accordance with European directives, in order to offer only the best to operators and manufacturers safeness.

- Made in Italy (fully CE compliant).
- Protection for all high pressure pneumatic and hydraulic hoses.
- Cabin opens only after high pressure air is released.
- Interlocking guards.

5. FASTEST CYCLE TIME: MAXIMUM PRECISION IN MINIMUM TIME

The ECS SP series, with its cutting-edge technology, offers various possibilities to always give the best results in the shortest possible time.

- Very Fast and precise movements.
- Injection mold opening stroke and force and blow mold clamping force can be easily adjusted via HMI according to requirement.
- Quick injection time.
- Adjustable opening press position, in order to **optimize the stroke, reducing cycle** time and consumptions (press opening according to container diameter).









	ECS SP MODEL	Number of cavities	Max thread diameter [mm]	Max container weight [g]	Max body diameter [mm]
	SP80	16	13	31,5	31
		14	16	36	37
		12	20	42	45
		10	30	50,5	55
		9	38	56	61
		8	44	63	68
		7	46	72	80
		6	63	84	93
		5	75	101	111
		4	95	126	141
		3	108	168	150
		2	122	252,5	168
		2	110	252,5	168
		1	130	505	215
	SP25	10	15	24	35
		9	17	26	40
		8	20	30	45
		7	28	34	52
		6	32	40	61
		5	38	48	72
		4	48	60	93
		3	58	80	122
		2	70	120	150
		1	100	240	150



AN ENDLESS RANGE OF PRODUCTION POSSIBILITIES

ECS SP are the ideal platforms to produce high quality containers with various designs and characteristics, for all applications such as cosmetics, personal care, detergents, foods, pharmaceuticals, miniature drinks and many more products.

SIPA

1000A

360

AUTOMOTIVE

SIPA



Downy

LIQUORS





PERSONAL CARE



PHARMACEUTICALS



ECS SP ADDED VALUES IN FEW WORDS

OPTIMIZED MOLD INVESTMENT



It is possible to use the same hot runner to produce different preforms

REDUCED ENERGY CONSUMPTION



Thanks to hybrid configuration (servo driven motors and hydraulic circuit with proportional valves)

FAST MOLD CHANGEOVER TIME



Thanks to the quick changeover features

HIGHER OUTPUT



On oval containers thanks to the advanced injection process



Sipa

Zoppas Industries

SIPA S.p.A. - Via Caduti del Lavoro, 3 31029 Vittorio Veneto (TV) Italy Tel. +39 0438 911511 sipa@zoppas.com

sipa.it