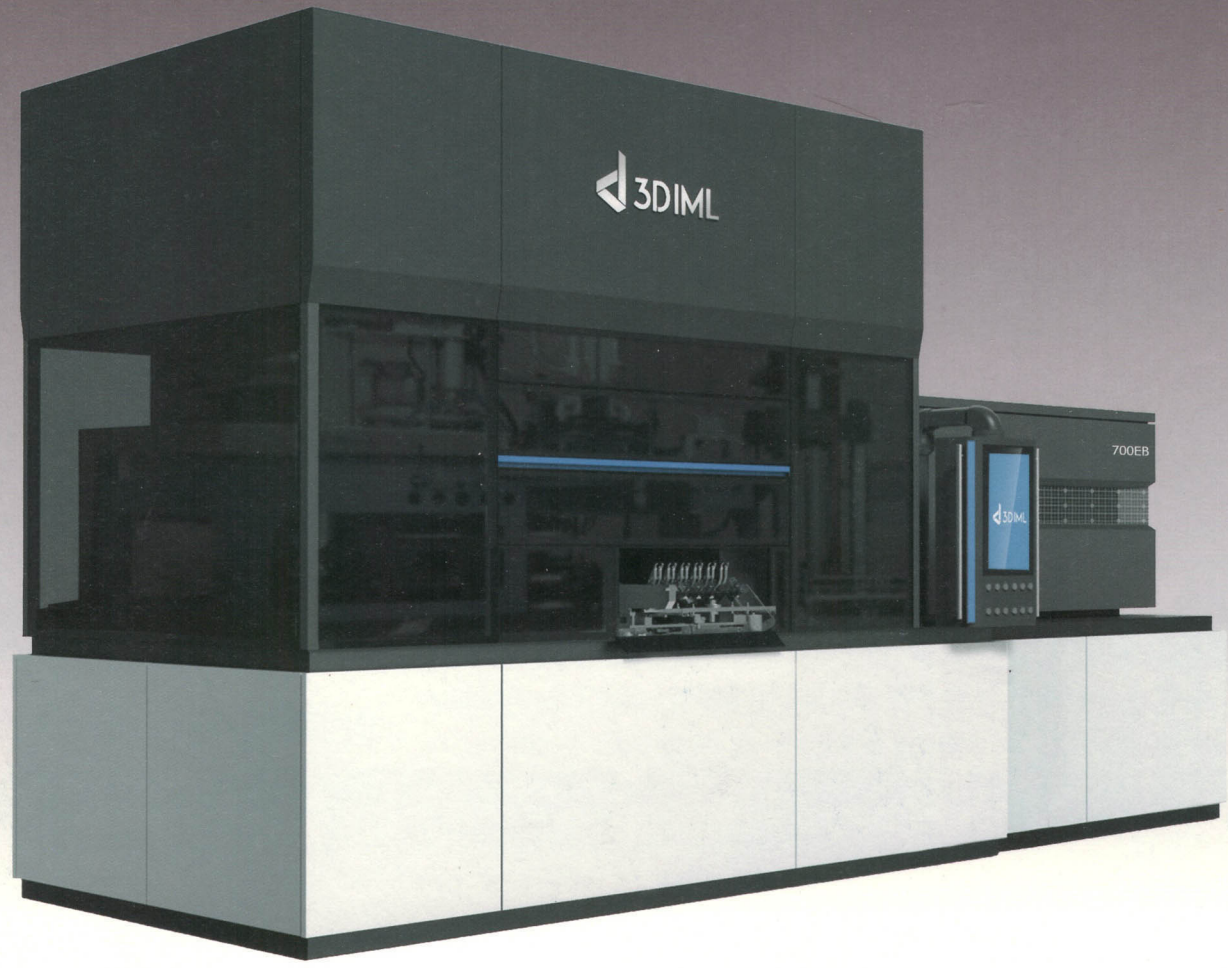
SW-EB SERIES

INJECTION STRETCH BLOW M/C



3D IML

"THE WORLD FIRST"
"THE WORLD BEST"

코크텍 (주)

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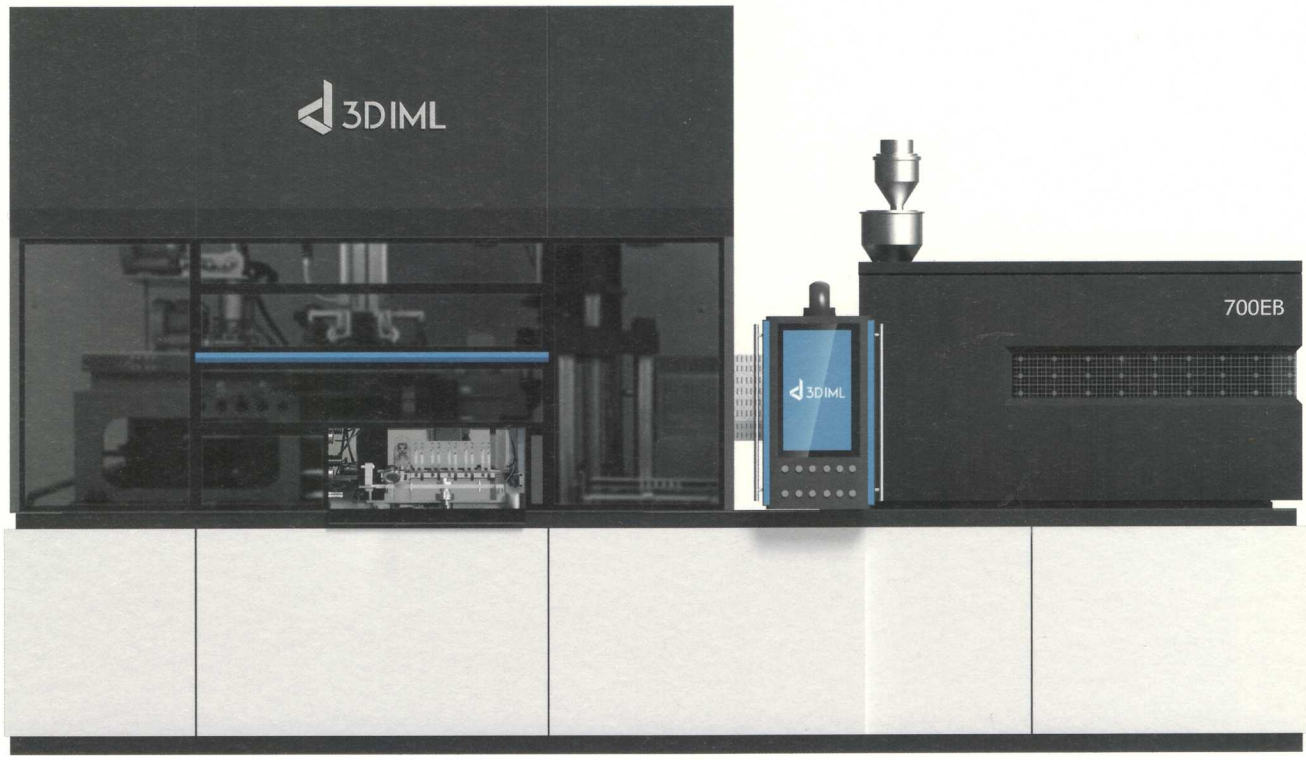
PET 3D IML Injection Stretch Blow Machine



- The world's first all electric PET Injection Stretch Blow Machine
- The world's first PET 3D IML(In Mold Label) technology
- Up to 70% in energy savings vs hydraulic systems
- Valuable product to implement 3-demensional shape of label blowing
- Pleasant and clean working environment
- Quick and easy mold change overs
- Advanced technology to help you efficiently produce high quality 3D IML products at a competitive cost, and stay eco-friendly

Certification/Awards

NeT 신기술인증 NEW EXCELLENT TECHNOLOGY

New Excellent Technology Authentication

산업통상자원부 koita 한국산업기술진흥협회

KOREA STAR AWARDS 2017

The government award of Future Packaging New Technology

KITECH 한국생산기술연구원 패키징기술센터 KOREA PACKAGING CENTER(KOPACK)

IR52 장영실상

IR52 Jang Young Sil Award

과학기술정보통신부 koita 한국산업기술진흥협회

3D IML

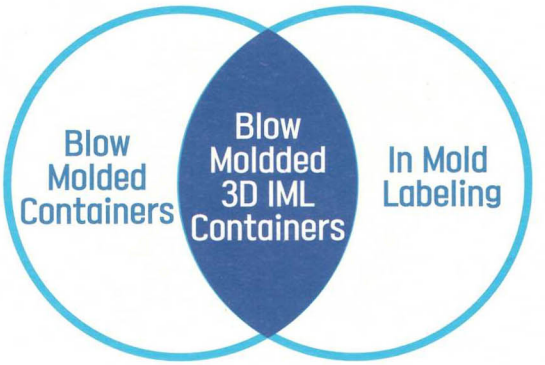
1st Class Recycling Certification for water separation

KTR 한국화학융합시험연구원

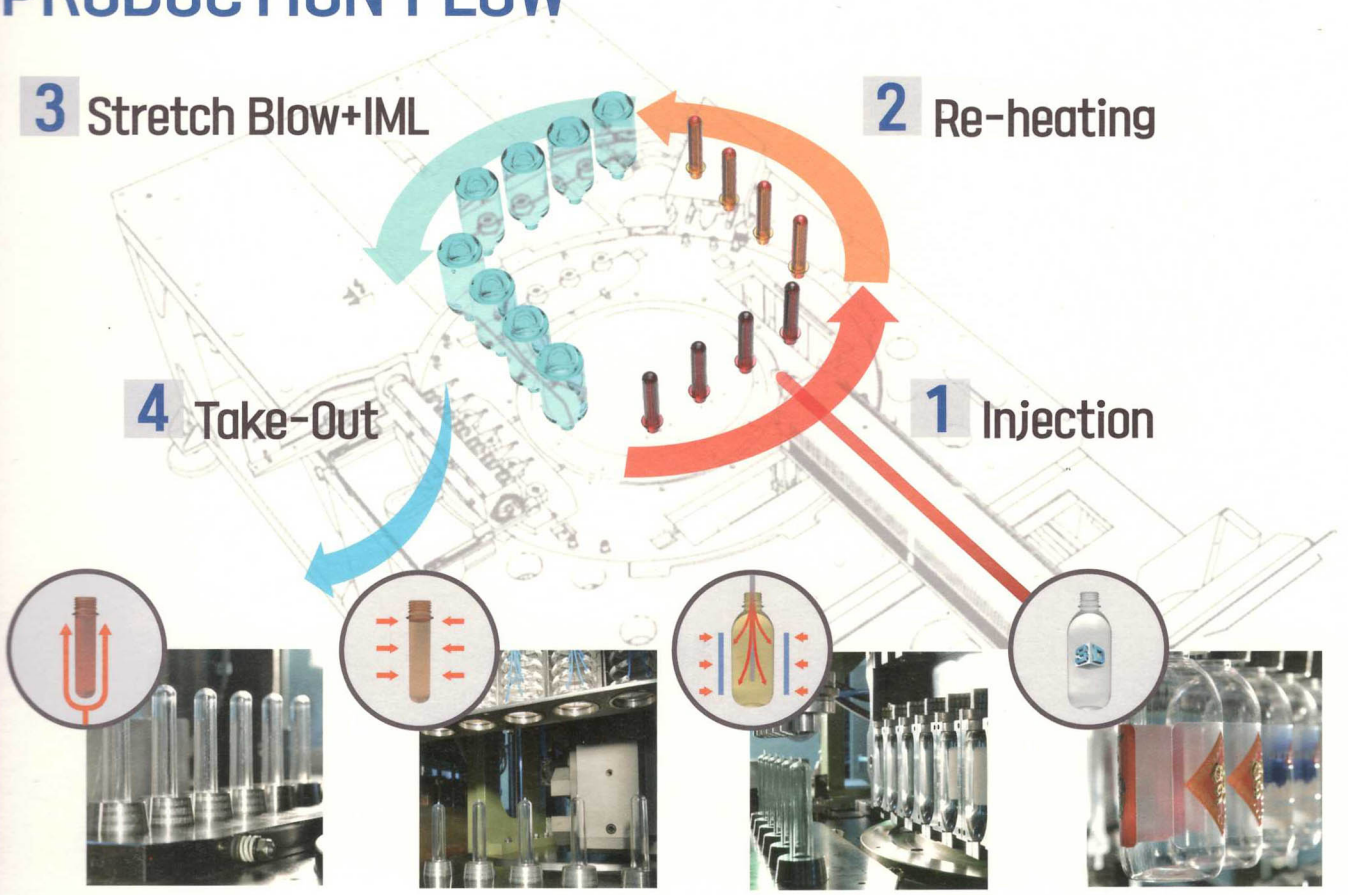
PET 3D IML TECHNOLOGY

Eco-friendly container production with IML technology

Possible to product the 1st class recyclable container using IML technology



PRODUCTION FLOW



1 Injection

The preforms are injected and cooled down below the crystalizing temperature for PET, but kept just hot enough to be blown. Easy production of non-standard and custom designs even with unique necks.

2 Reheating

A variety of technologies can be applied to optimize the preform temperature profile, enabling lightweight and strong containers to be molded in a variety of materials.

3 Stretch Blow

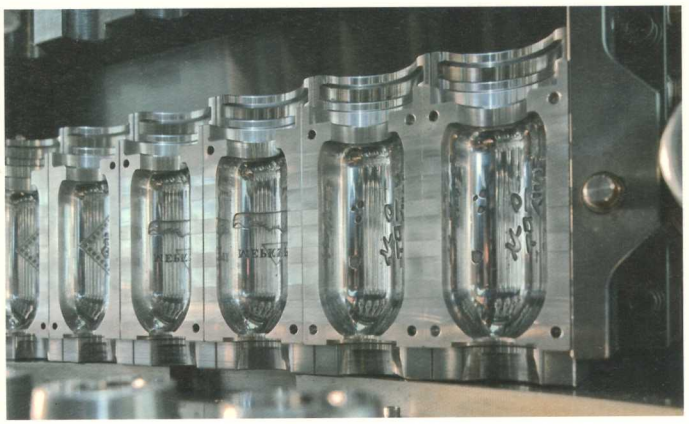
Stretch Blow Molding is a technologically intensive process that involves injected and preheated preforms being blown to shape with high pressure air, and a label that is inserted into the mold simultaneously.
The precise positioning of the label, the accurate control of the mold's temperature, the insulation between the mold and machine, the high speed opening and closing of the mold, the stretching process, the anti-shock control when blowing, and all of the other various technologies involved are all done with our technologically advanced and accurate controls.

4 Take-Out

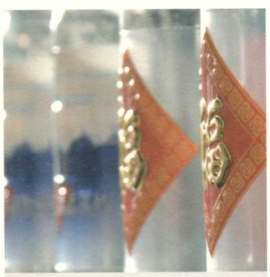
The container is protected from any possibility of being scratched or damaged by being extracted by the lip, unlike conventional extraction methods.
This method of extraction is perfect for cosmetic applications that require the container to be free of any scratches.

PET 3D IML ADVANTAGE

- The ability to produce unique containers with 3D labels using IML technology
- Technology to realize creative shape of the container through mold shape and label
- In Mold Labeling improves logistics and reduces costs by eliminating the need to add labels through secondary processes
- Express 3D original brand logos, images and characters on your product
- Innovative new technology with excellent marketability and eco-friendly



PET 3D IML VALUE



Upgrade your product by highlighting key characteristics in 3D

Product name, company logo, images, etc

3D IML

Products that make characters and logos stand out through 3D design

Various shapes such as characters and figures

Eliminate conventional secondary processes to simplify production, and reduce costs

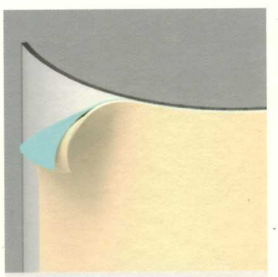
IML can replace: sticker labels, silk screen printing, thermal transfers, etc.

3D IML

3D IML

Original anti-forgery available

Even the same image labeling container, it is possible to distinguish between images and 3D protrusion



Eco-friendly 3D IML

Recyclable 1 and 2 certification technology IML labels without any additional solutions/chemicals

3D IML

Machine Specifications

Injection unit		SW-700EB	SW-400EB	SW-200EB
Screw Diameter	mm	55	50	40
Injection Pressure	kgf/cm2	1205	1205	1205
Theoretical Injectio Capacity	cm3	523	314	163
Injection Weight(PS)	g	700	400	200
Screw Stroke	mm	220	160	130
Injection Speed	mm/sec	125	125	150
Plasticizing Capacity(PS)	kg/h	227	192	127

Clamping Unit		SW-700EB	SW-400EB	SW-200EB
Clamping Force	ton	70	70	70
Max. Stroke	mm	525	525	425

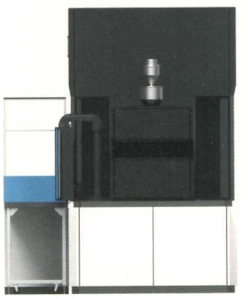
Turn Table		SW-700EB	SW-400EB	SW-200EB
Table Size	mm	1480	1480	1370
Number of Lip Plates	ea	4	4	4

Blow Unit		SW-700EB	SW-400EB	SW-200EB
Clamping Force	ton	70	70	30
Clamping Stroke	mm	400	400	400
Blow Air Pressure	kgf/cm^2	40	40	40

Others		SW-700EB	SW-400EB	SW-200EB
Machine Weight	ton	16.0	15.0	12.0
Machine Size(L*W*H)	m	6.2X2.1X4.5	6.2X2.1X4.5	5.5X1.8X4.0
1st Utility	kwh	40	40	20
Actual Power Consumption	kwh	12	11	9

Applicability	SW-700EB			SW-400EB			SW-200EB		
Max. Cavities(ea)	2	4	6	2	4	6	2	4	-
Max. Neck Diameter(mm)	55	50	38	55	50	38	55	50	-
Max. Body Diameter(mm)	140	120	75	140	120	75	110	90	-
Max. Height(mm)	320	320	320	320	320	320	260	260	-

* Specifications are subject to change without notice for improvement of performance



Comparative Table

Maker	Shinwoo Costec	Shinwoo Costec	Shinwoo Costec
Model	SW-700EB	SW-400EB	SW-200EB
Driving Power	100% Electric Servo Motor	100% Electric Servo Motor	100% Electric Servo Motor
Injection Capacity (Cm3)	523	314	163
Max. Cavities	2~12	2~6	2~4
Max. Neck Diameter (mm)	D:140 x H320	D:140 x H320	D:110 x H260
Max. Air Pressure (Bar)	40	40	40
Blowing Pressure Condition	P1, P2, P3(Cooling)	P1, P2, P3(Cooling)	P1, P2, P3(Cooling)
Actual Power Consumption (Kwh)	10~15	9~14	8~12
IML Available	Yes	Yes	Yes
Silk screen & Thermal transfer printing	Yes	Yes	Yes
Max. Blow Clamping Stroke (mm)	400	400	400
Cycle Time (Sec) (30g, 300ml, 6Cav' based)	15 (without IML) 18 (with IML)	15 (without IML) 18 (with IML)	15 (without IML) 18 (with IML)
Blow Mold Clamping Type	Crank Clamp	Crank Clamp	Crank Clamp
Injection Mold Clamping Type	Toggle Clamp	Wedge	Wedge
Label Entry direction of Label	Top entry	Top entry	Top entry
Color Mixing Screw	Standard	Standard	Standard

* Specifications are subject to change without notice for improvement of performance

3D IML

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