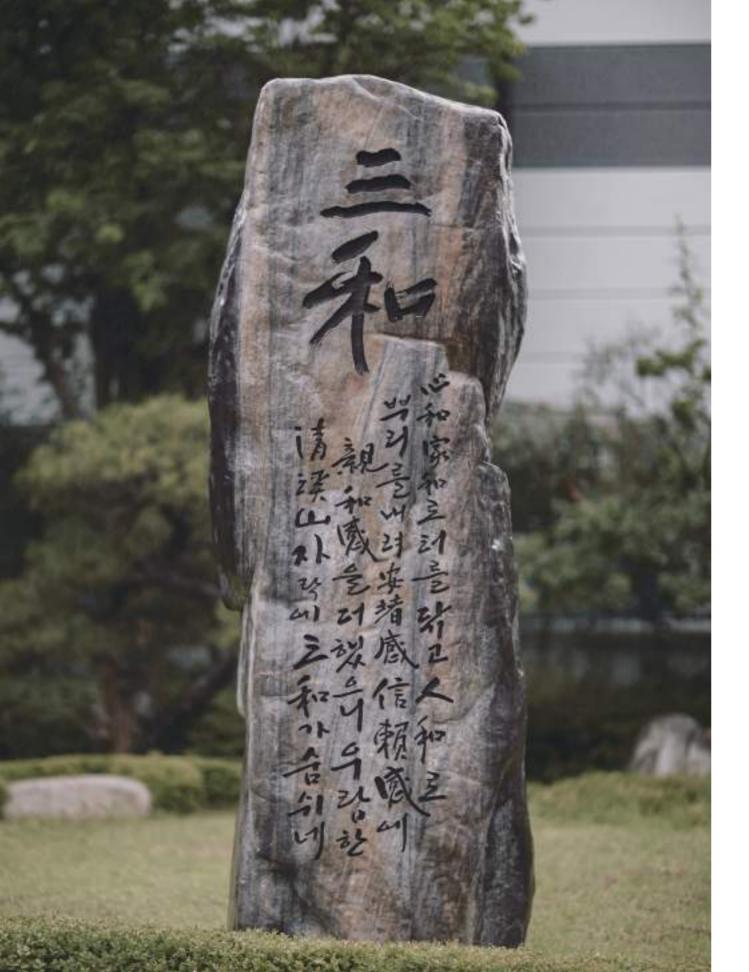
# ZMHWA

2022 SAMHWA RESEARCH & DEVELOPMENT



2022 SAMHWA
RESEARCH AND DEVELOPMENT



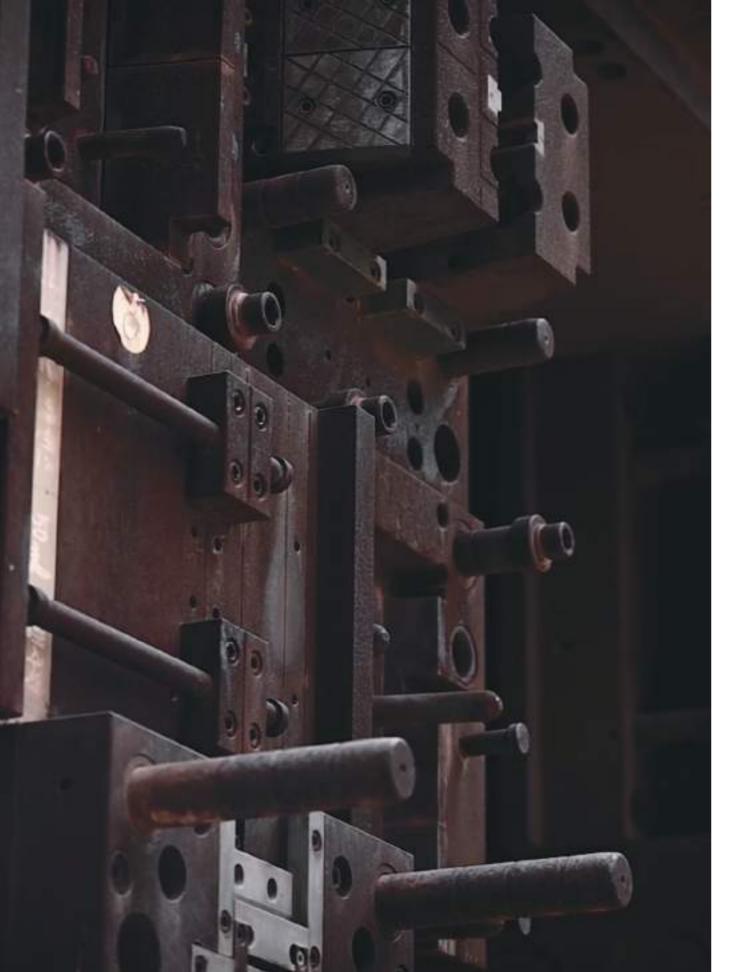
# Corporate philosophy

For the past 40 years following our motto, integrity, humility and creativity, Samhwa has been at the forefront in domestic cosmetic packaging market.

Instead of pursuing a rapid growth, Samhwa steady and consistently focused in creativeness for innovation with continuous investment in our R&D and was able to promote and introduce GLOBAL MEGA HIT innovative product.

However over the past 40 years, the most significant growth driver was the pursue of our company motto to make wise decisions within fast-changing internal and external environmental factors.

Samhwa co., Ltd envision a right path toward the future with new synergies to continuously bring innovative product to our customers.



# R&D philosophy

Samhwa started business with mold engineering. Over 40 years of capitalized knowhow on mold engineering and technology bring Samhwa to lead and continuously innovate by developing top leading airless and airtight cosmetic products. Based on our expertise in mold engineering and technology, our R&D is concentrating on developing new innovative product with high quality standard and competitiveness within the cosmetic industry.

Lately, we have focused on developing INNO-ECO-Products following the current market trend of favoring eco-friendly products satisfying the 3R aspects (Recycle / Reduce / Reuse). As a result of huge efforts, we were able to successfully develop a new pumping technology and a refill system structure that can combine simplicity and convenience of use. Through the progress, we have taken a step closer to our aim to satisfy the customer and as well consumer who use SAMHWA product.

INNO-ECO-Products are safe for brands, consumers, and environment.

Samhwa will offer the right quality of products to fulfil the customer's complete satisfaction.











Samhwa is promptly handling the entire processes with an all-in-house system.

In addition, from cosmetics and daily supplies to medicine and medical supplies, Samhwa is a comprehensive plastic manufacturer that designs, produces and sells plastic-based everyday tools, which make up an irreplaceable part of our lives.

Considering environment and future, Samhwa is researching & developing BLOW / ECO PUMP / CUSHION products and introducing them under Samhwa's packaging Mazel brand.

# new developments in samhwa



2022 SAMHWA R&D

# **INNOVATION**

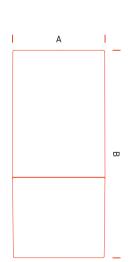
SAMHWA keep pushing technical boundaries in each of our new innovative products to combine rapid changing consumer beauty trend needs and sustainable responsibility with the goal to make a step closer in our aim to satisfy our customers and as well consumers who will use SAMHWA innovation.

# **NEW DEVELOPMENTS**

# **NEW DEVELOPMENTS**

#### **Refillable Stick**

Refill stick container with airtight function to keep the contents fresh





Volume

15g

Size

A: Ø35mm / B: 82mm

Material

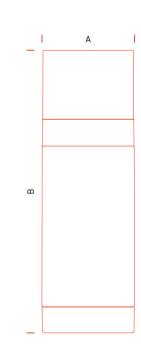
All parts PP



# **Master Blending**

A container that can be used by mixing the formulas by controlling the discharge amount ratio of the two formulas





#### DMA-45DM-01-A

**Volume** 80ml (40+40)

**Size** A: Ø48mm / B: 149mm

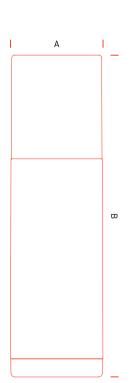
Material

Outer Body: PETG Other parts: PP

# **NEW DEVELOPMENTS**

#### **TL Focus**

A new crystal clear package with a centered flow but without the need of straw or piston



#### ETL-50CM-01-B

**Volume** 50ml

C:--

A: Ø36mm / B: 125mm

Material

Outer Body, Inner Body, Cap : PETG

Other parts: PP





A |

**TL Wide** 

A new crystal clear package without

the need of straw or piston

#### ETL-50CM-01-A

**Volume** 50ml

Size

A: Ø35mm / B: 133mm

Material

Outer Body, Inner Body, Cap

Other parts: PP

: PETG

# **NEW DEVELOPMENTS**

#### **Slim Palette**

Slim palette with a sense of quality featuring Samhwa double injection technology to protect the formula





#### CDS-E05M-01-A

Volume

4.8g (4x1.2g)

Size

A: 60x63mm / B: 12mm

Material

Body: PETG Other parts: PP



**Slim Lip Gloss** Slim lip gloss with a sense of quality featuring Samhwa double injection technology to protect the formula

> Α В LSQ-006M-02-A

Volume 5.5g

Size A: 19x19mm / B: 98mm

Material

Outer Body, Stem: PETG Other parts: PP





# INNO-ECO PUMP

Focusing more on developing materials that make innovative products stand out and focus on research and development of rubber, textile, metal, and glass as well as plastic materials. Recently, we have succeeded in commercializing them in cooperation with material partners on the goal of developing eco-friendly materials.

As well, Samhwa invest to develop injection machine, tool and decoration technologies to implement new materials. Based on material specialization, Samhwa can meet customer demand by implementing their brand image through packaging.

## VER. I

#### Output

0.15cc 0.20cc

#### Model year

1990~

#### Struchture

Internal spring SUS Ball valve type

#### Feature

Strong durability
Risk of contamination by metal



# VER. II

#### Output

0.10cc 0.15cc 0.20cc 0.25cc 0.30cc 0.50cc 0.70cc 1.00cc

#### Model year

2000~

#### Struchture

External spring
PE Disk valve type

#### Feature

Prevent contamination by metal
Delivery / Cost improvement with module system

# **VER. III**

#### Output

 0.15cc
 0.80cc

 0.20cc
 2.00cc

 0.30cc
 3.00cc

#### Model year

2020~

#### Struchture

Bi-injected Eco spring Only Polypropylene used

#### Feature

No Metal Spring No POM Mono Material

#### — PATENT PENDING —





ECO ENGINE ECO ENGINE

#### **ECO Slim Airless**

Slim airless that is easy to recycle by applying eco-friendly materials



#### AES-015M-01-A

**Volume** 15ml

Size

A: Ø28mm / B: 96mm

**Material**All parts PP

AES-030M-01-A Volume

30ml

Size

A: Ø28mm / B: 133mm

**Material**All parts PP



# ECO P1/P2 AIRLESS

Easy to recycle by applying eco-friendly materials. Airless with a smooth design



#### P1: AEP-030M-01-A

**Volume** 30ml

0.20

A: Ø36mm / B: 68mm

Material

All parts PP

#### P1: AEP-050M-01-A

**Volume** 50ml

A: Ø36mm / B: 93mm

**Material** All parts PP

#### P2: AEP-100M-01-A

**Volume** 100ml

**Size** A: Ø45mm / B: 126mm

Material All parts PP



#### **D/P ECO PUMP**

The mono material engine is engineered with removing the use of POM (harmful raw material to consumer) to protect consumer.

The engine implement an all PP mono material spring to prevent formula contamination as well as respecting environmental needs.





No Metal spring No POM Mono Material

ZAMHWA



# Development of eco-friendly materials

Focusing more on the development of materials that make innovative products stand out and focus on research and development of rubber, textile, metal, and glass as well as plastic materials. Recently, we have succeeded in commercialising them in cooperation with material partners on the goal of developing eco-friendly materials.

As well, Samhwa invest to develop injection machine, tool and decoration technologies to implement new materials. Based on material specialisation, Samhwa can meet customer demand by implementing their brand image through packaging.

### **Sustainable Materials - PCR(post)**

Through cooperation with domestic and foreign petrochemical manufacturers, we have secured more than 90% of needed raw materials to produce Samhwa's freemold products. We will expand as well our investment with the aim to secure reliability on functional parts and enhancing appearance quality.







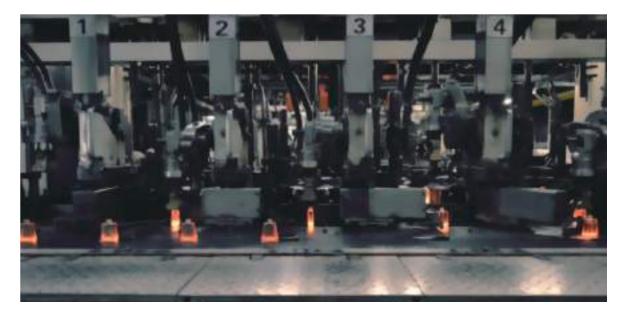
### **Safe Materials Antimicrobial Activity**

With improved living standards and growing interest in personal hygiene, consumer needs are increasing to find a safe material that is resistant to germs in everyday life as well as being harmless to the human body and environment. Samhwa is making every effort to develop antibacterial materials and to study the structure to maintain its continued antibacterial properties.

#### **Inno-Eco-Glass Bottle**

Compared to plastic materials, glass is generally used for perfume and cosmetic package with the advantage of recyclability, chemical resistance, transparency and heavy weight. Capitalising on theses advantages, Samhwa has successfully launch glass cosmetic package which meets aesthetic and functional requirement. Samhwa next step is to develop foundation or color cosmetic package taking advantage of the glass material property.





#### mazel

# REUSE : Refill Mechanism

With continuous research on consumers / customers specific needs and extensive market research, our R&D developed and engineered innovative way to design the next generation eco-friendly product. Samhwa implemented patented refill mechanism across our product line-up to bring to our customer simplification for refill filling industrialization and as well for consumers a simpler way to reuse their product.

## **Jar Type Reuse**

**TURN TO REFILL** 



#### Glass Refill Jar

#### Material

Outer Body: GLASS Inner Cap, Refill: PP Other parts: PETG

## **Jar Type Reuse**

#### **PUSH TO REFILL**



Push Refill Jar

#### Material

Outer Body: PETG Refill: PP Other parts: PCR ABS



## **Airless Type Reuse**

#### **TURN TO REFILL**

Glass Refill Airless V2

#### Material

Outer Body: GLASS or PET Other parts: PP



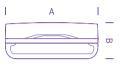




REFILL & ECO REFILL & ECO

#### **GL Blow Eco Pact**

Pact with a large capacity airtight refill system. Introduce a new way to refill a pact: 'turn to refill'





#### CEB-030M-01-A

Volume

30g

Size

A: Ø76mm / B: 29mm

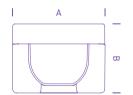
Material

Bottom Case: PET

Other parts: PP

### **Push Refill Jar**

'Push to refill', the new elegant and luxurious way to refill a jar  $\,$ 



#### JPR-050M-01-A

Volume

50g

Size

A: Ø74mm / B: 55mm

Material

Outer Body: PETG

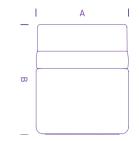
Refill: PP

Other parts: PCR ABS



#### **Eco AJ Touch Refill Jar**

Hygienic jar as the contents do not come into direct contact with your hands. Glass touch container with anti-bacterial material and eco-pump applied



#### JAJ-050M-01-A

**Volume** 50g

Size

A: Ø69mm / B: 76mm

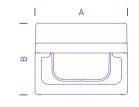
Material

Outer Body: GLASS
Other parts: PP

#### Glass Refill Jar V2

A luxurious glass refillable jar that can be easily refilled by just turning the shoulder





#### JGR-050M-01-B

**Volume** 50g

A: Ø75mm / B: 57mm

Material

Size

Outer Body: GLASS Inner Cap, Refill: PP

Other parts: PETG

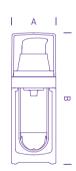
**REFILL & ECO** 

## **Glass Refill Airless / DP / Eco Mist**

Luxurious Airless, DP and Mist featuring Samhwa eco pump and refill system



**Airless** 



Airless: AGR-015M-01-A DP: DGR-015M-01-A Mist: DGR-34MM-01-A

Volume

15ml

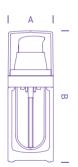
Size

A: Ø37mm / B: 113mm

Material

Outer Body: GLASS or PET Other parts: PP





AGR-020M-01-A DGR-020M-01-A DGR-34MM-02-A

Volume

20ml

Size

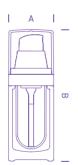
A: Ø37mm / B: 124mm

Material

Outer Body: GLASS or PET Other parts: PP



**Eco Mist** 



AGR-030M-01-A DGR-030M-01-A DGR-34MM-03-A

Volume

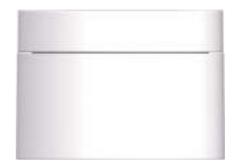
30ml

Size

A: Ø37mm / B: 159mm

Material

Outer Body: GLASS or PET Other parts: PP



**REFILL & ECO** 

Eco-friendly all PP jar for easy recyclability

JPC-050M-01-A

**Eco Jar** 

Volume 50g Size

A: Ø64mm / B: 46mm

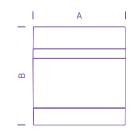
Material

All parts PP

#### **Eco Dial Jar**

Eco-friendly product designed and structured in all PP mono material for easy recyclability. Featuring hygienic delivery system with innovative way to delivery formula compared to traditional jar





JDC-050M-01-A

Volume

Size A: Ø69mm / B: 73mm

Material

All parts PP

50g

# RELIABLE PACKAGING

#### Protect your everyday with reliable packaging

Research and development on safe material as well as development of touch-less packaging, Samhwa push forward for more safe and reliable packaging to protect consumer everyday life in any condition.

Samhwa's INNO-ECO-PUMP, touch-less, inter-changeable surface with safe material products bring more protected packaging solution for the customer.



## **Easy to Wash**

Elastomer

MTSP

Material Piston: LLDPE Holder: LLDPE Other parts: PP







Spoid Push Ampoule

Material Piston: LLDPE Other parts: PP Medi Ampoule

Material All parts: PP



Material Cap, Body: PETG Piston: LLDPE Other parts: PP

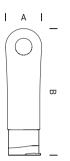


# **RELIABLE PACKAGING**

# **RELIABLE PACKAGING**

#### **Butterfly Hinge Sanitiser**

Simple and fashionable portable sanitizer. Can be strapped as well to be ready in anytime



#### B24-030R-01-A

Volume 30ml

Size

A: 32mm / B: 113mm

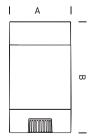
Material

All parts: PP



#### **MTSP**

New stick design package with applicator which is easy to clean. Always clean for daily usage



#### SMT-065M-01-A

Volume 65g

A: 66mm / B: 119mm

Material

Piston: LLDPE

Holder: LLDPE

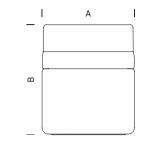
Other parts: PP





#### **AJ Refill Cream Jar**

Hygienic jar as the contents do not come into direct contact with your hands. Airless touch container with anti-bacterial material applied



#### AAJ-050M-01-C

Volume 50g Size

> A: Ø67mm / B: 76mm Material

> > Outer Body: PETG Other parts: PP

# AAJ-030M-01-C

Volume 30g Size A: Ø62mm / B: 64mm

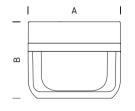
Material

Outer Body: PETG Other parts: PP

### **New Hinge Refill Jar**

New jar that can be stored and used cleanly with a lid combined with an inner container





#### JRE-050M-01-A

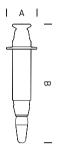
Volume 50g Size A: Ø69mm / B: 57mm

> Material All parts: PP

# **RELIABLE PACKAGING**

#### **Medi Ampoule**

An ampoule container that is easy to use and easy to carry



#### EME-01CM-01-A

Volume

1.5ml

Size

A: 17mm / B: 65mm

Material

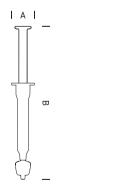
All parts: PP



### **Spoid Push Ampoule**

Inspired by the design of a classic syringe.

An ampoule container that is easy to use and easy to carry



#### ASP-015M-01-A

Volume

1.5ml

Size

A: 17mm / B: 110mm

Material

Piston: LLDPE / Other parts: PP







Size

A: Ø17mm / B: 136mm

Material

Cap, Body: PETG

Piston: LLDPE

Other parts: PP



ARR-010M-01-B SPOID TIP

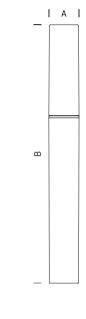
Volume 10ml Size

A: Ø17mm / B: 144mm

Material Cap, Body: PETG Piston : LLDPE Other parts: PP

## **Rolling Serum**

Featuring 3 specific applicator for targeted usage. Enhanced soft push side button system to deliver precisely each single formula drop





10ml **Size** A: Ø17mm / B: 144mm

Material
Cap, Body: PETG
Piston: LLDPE
Other parts: PP

# **RELIABLE PACKAGING**

#### **Basic Ampoule**

A container that can be used drop by drop as much as you want with the push of a button



#### EBA-10CM-01-A

**Volume** 10ml

Size

A: Ø27mm / B: 59mm

Material

Outer Body: PETG

Other parts: PP



#### EBA-15CM-01-A

Volume 15ml Size

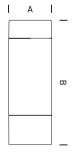
A: Ø27mm / B: 82mm

**Material** Outer Body: PETG

Other parts: PP

### 2 in 1 Push Ampoule

One step push provide a fresh mix of 2 combined formula delivered at once



#### EMA-C10M-01-A

Volume

8ml + 2g

Size

A: Ø27mm / B: 82mm

Material

Outer Body: PETG
Other parts: PP



#### **RG Ampoule**

Α

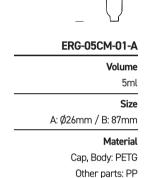
Versatile for use in a variety of capacities Ampoule container to use at the push of a button



ERG-10CM-01-A	ERG-M15M-01-A
Volume	Volume
10ml	15ml
Size	Size
A: Ø29mm / B: 72mm	A: Ø29mm / B: 87mm
Material	Material
Cap, Body: PETG	Cap, Body: PETG

Other parts: PP

Other parts: PP



### 2 in 1 Twister Ampoule

A twist provide a fresh mix of 2 combined formula delivered at once



_	I A I
В	
_	

ETA-C20M-01-A
Volume
10ml + 10ml

A: Ø30mm / B: 100mm

Cap, Body: PETG / Other parts: PP

44

Size







# Blow Development

Samhwa co., Ltd has been leading the global skincare market with airless and dispensing pump product, as well as the global makeup market with the World's Best airtight compact.

With continuous investment in business expansion, in 2018, Samhwa expanded it's operation to enter the household product market by building a blow facilities.

With over 40 years of experience and technology knowhow, Samhwa will bring the innovative blow product to the cosmetic market as well as the household market.

2022 SAMHWA R&D

NMHMNZ

#### mazel

# Heavy blow method container made



Blow injection machine line

#### **Core Technology**

Lighter than glass, unbreakable, and has the same effect as glass (increased price competitiveness) Various designs and post-processing available



Based on our mold knowhow, we are planning and developing a wide range of product. We are also developing products in collaboration with domestic and foreign customers.



Auto label application process



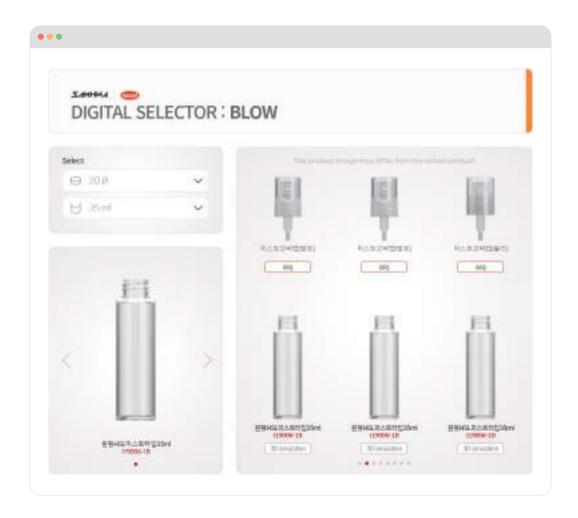




# SAMHWA Blow Digital Catalog

www.samhwakorea.com

Navigate BLOW bottles and combination by neck size and bottle capacity



## **MMP Simulation**

3D simulation experience

Detailed product selection Product Details Product Features 3D Rotation View Request A Quote





**Blow** 

# **Blow**

# **Bottle**

6.5ml	30ml	35ml	<b>40</b> ml	<b>43</b> ml	50ml	
Slim Shaker Ø17	Hidden Ø18	HSL Ø20	Smart Dropper Ø18	Classic Circle Ø20	Hexa_GPC Ø18	Ringer Ø18
	Boston Ø18	y.Z.	Classic Circle Ø20	y Z O	TR Ø20	CRX Ø24
	<b>GL PACT</b> Ø66		HSL Ø20		R3 Ø20  R5 Ø20  Boston Ø18	Jar Square Ø57

# Bottle

60ml	80ml	100ml	120ml	125ml	130ml	140ml
11	124	21.				
Hidden	PL_DP	Hidden	КМ	MR	PL_DP	Hexa_GPC
Ø18	Ø18	Ø18	Ø20	Ø24	Ø17	Ø20
11	11	11	43.		4	
			-			
<b>CV</b> Ø18	<b>Hidden</b> Ø18	Hidden CO18 Ø18	Classic Square Ø20		<b>CRX</b> Ø18	
11	ы	#			11	_
					0.00	
Mist Circle Ø20	Mist Circle Ø20	Boston Ø18	Jar Circle Ø55		<b>Hidden</b> Ø18	_
Ö		11			44	
Classic Circle Ø20	Classic Square Ø20	Mist Circle Ø20			<b>Boston</b> Ø18	
	Jar Circle Ø55	Classic Square Ø20				

# **Blow**

**NECK** 

#### **Bottle**

Ringer Classic Circle ©20 ©24 ©24 ©24 Classic Circle Screw ©24 ©24 ©24 Classic Circle Screw ©24 ©24 Classic Circle Snap-on	150ml	200ml	280ml	300ml		400ml	500ml
### ### ### ### #### #### ############	11		Ц		П	-	A
### ### ### ### #### #### ############	-		-	-	-	-	otto-
Φ20         Φ24							
\$\frac{\phi_{20}}{\phi_{20}}	43			-	44		A
\$\frac{\phi_{20}}{\phi_{20}}		-		-	-		-00-
Φ20         Φ24         Φ24           Classic Circle         Circular Angle         Φ24           Φ20         Φ24         Φ24           Circular Angle         Φ24           CRX         DMI							
Φ20         Φ24         Φ24           Classic Circle         Circular Angle         Φ24           Φ20         Φ24         Φ24           Circular Angle         Φ24           CRX         DMI		14					A
Classic Circle ©20 Circular Angle ©24 ©24							
Ø24 Ø24  CRX DMI	**			PH			
CRX DMI							
CRX DMI	Д			A			
	CRX			DMI			

#### Ø18 Ø20 Ø24 Ø39 Ø44 PUMPS5007 PUMPS5008 CAPPS1002 CAPPS1005 CAPPS1014 PUMPS5019 CAPPS1006 Ø20 Ø39.8 PUMPS5010 PUMPS5015 PUMPS5020 CAPPS1020 CAPPS1016 CAPPS1021 PUMPS5011 PUMPS5016 Ø24 PUMPS5001 CAPPS1007 Ø45 CAPPS1022 PUMPS5009 PUMPS5017 CAPPS1003 PUMPS5002 CAPPS1017 CAPPS1015 CAPPS1024 CAPPS1001 PUMPS5018 CAPPS1004 PUMPS5006

**Blow** 

# **Blow**

#### **SPRAY**

**ECN** 

40° (PUMPS5014 + CAPPS1012) 60° (PUMPS5096 + CAPPS1012)





40° (PUMPS5014 + CAPPS1023) 60° (PUMPS5096 + CAPPS1023)

VALT



40° (PUMPS5014 + CAPPS1011) 60° (PUMPS5096 + CAPPS1011)

#### **SPOID**

Ø18



CAPPS1028

#### Ø20



CAPPS1029

# **ECT**

**SLIM CAP** 

CAPPS1026





CAPPS1027

CAPPS1025







**202 Eco Mist 0.15cc** + Classic Circle (Ø20, 120ml)





2022 **SAMHWA RESEARCH &** DEVELOPMENT



samhwakorea.com @samhwa\_packaging