

# GREETING MESSAGE

# The passion and challenge for the world best company!

Yusang specializes in the manufacture of industrial materials not alone packaging materials which is basis for the food industry but also electronic materials protection film.

Since its establishment in 1976, Yusang has been trying to contribute to the happiness of humankind by providing eco-friendly products and services.

Starting with its gravure printing business in 1977, Yusang has expanded its field of business from plastic molding business in 1984 to non-oriented coextrusion film business in 1987 upon the foundation of faith and trust of customers.

In the years to come, Yusang will provide the best solutions what customers need with high value added technology and quality competitiveness.

# **BUSINESS OVERVIEW**

Enriching lives!
Yusang will lead the way.











1970... 1980...

1976.08 Established Yusang Industrial Company, Inc. (capital stock 50 million won)

1976.09 Flexible package product launch

1979.08 Increased capital to 100 million won

1981.04 Installed Gravure printing equipment (NAKAJIMA 6°)

1982.11 Increased capital to 150 million won

1983.05 Installed Gravure printing equipment and its related facilities (NAKAJIMA 7°)

1984.09 Established the first factory in the Banwol Industrial Complex (production of flexible package material)

1984.11 Installed the first vacuum molding equipment (production of molding products)

1987.09 Installed the first coextrusion(3-layers) film machine (production of film products)

1989.03 Installed the first vacuum metallizing machine (LEYBOLD AG.,) (production of deposition products)

1989.05 Installed the coextrusion (3-layers) film machine (MODERN)

1989.08 Installed of the second vacuum molding equipment (Senba)

## 1990...

1991.03 Installed third vacuum molding equipment (Senba)

1991.05 Increased capital stock to 300 million won

1991.06 Established the second factory in the Banwol Industrial Complex (production of film and molding products)

1992.01 Installed tandem extruder for extrusion coating

1992.03 Received award from the Minister of Finance (Taxation day)

1992.03 Installed the second vacuum metallizing machine (leybold ag.,)

1992.05 Installed the first curved surface printer (KASE)

1993.04 Installed Gravure printing equipment (8 degrees)

1993.09 Installed the coextrusion (3-layers) film machine and its related facilities

1994.03 Installed the second curved surface printing machine. (VAN DAM)

1994.04 Installed pressure vacuum molding equipment (ADOLF ILLIG)

1995.04 Installed the third curved surface printing machine (VAN DAM)

1995.05 Installed the coextrusion film (triple layer) and its related facilities (MITSUBISHI)

1996.07 Installed motor operated pressure vacuum molding equipment (Senba systems)

1997.11 Installed KAMP SLITTER equipment (KAMP)

1997.12 Installed the fourth curved surface printing machine (KOHOKU SEIKO)

1998.03 Received award from the Minister of Strategy and Finance (Taxation day)

1999.05 Received award from the Minister of Commerce, Industry and Energy (outstanding small and medium businesses award)

# 2000...

2000.09.29 Installed Gravure printing equipment (8 colors)

2000.06.05 Installed the coextrusion film machine

2001.03.03 Received award from the Seoul regional tax commissioner (Taxation day)

2001.03.29 Installed the second evaporation equipment (APPLIED FILMS GmbH)

2001.11.29 Installed the first coextrusion (5-layers) film blown (LUIGI BANDERA)

2002.01.07 Installed the 4th molding equipment (45 ton pressure forming) (TOKO)

2002.03.03 Received award from the deputy prime minister and minister of strategy and finance (Taxation day)

2003.05.27 Installed slither rewinder equipment

2003.12.11 Acquired ISO 9001, 2000 certification

(AJA Korea international certification institute)

2004.02.10 Installed air pressure and vacuum molding equipment and its related facilities (ADOLF ILLIG)

2004.06.25 Installed coating & dry laminating equipment (Seotong technology, Inc.)

2005.03.03 Received award from the deputy prime minister and minister of strategy and finance (Taxation day)

2006.05.10 Installed the coextrusion 3-layers film machine (Windmoller & Holscher)

2007.01.19 Changed company name to Yusang Co.,Ltd

2008.09.22 Installed the 3rd vacuum metallizing machine (Applied Materials GmbH)

2009.03.03 Received award from the Minister of Strategy and Finance (Taxation day)

2009.12.03 Received the award for exporting more than \$1,000,000 on the 46th Trade day

# 2010...

2010.04.30 Installed slither rewinder (FUJI TEKKO)

2010.09.30 Installed the 9 colors gravure printing machine

2010.09.30 Installed dry laminating machine

2010.12.15 Installed the coextrusion(3-layers) film machine (Windmoller & Holscher)

2010.11.30 Received the award for exporting more than \$5 million worth of goods on the 47th Trade day

2011.12.12 Received the award for exporting more than \$10 million worth of goods on the 48th Trade day

4 THE LEADER FOR TOMORROW YUSANG MILESTONES 5

## Quality management system certification

# CERTIFICATE

QUALITY MANAGEMENT SYSTEM



 Valid Date
 2012. 12. 20 ~ 2015. 12. 19

 Issue Date
 2012. 12. 20

 Initial Registration Date
 2012. 12. 20

 Attestation Number
 AC-05446

#### YUSANG CO., LTD.

- FACTORY 1 : 271-16, Gangchon-ro, Danwon-gu, Ansan-si, Gyeonggi-do, 425-100, Korea
- FACTORY 2: 64, Sinwon-ro 91beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, 425-833, Korea
- HEAD OFFICE: 240, Dangsan-ro, Yeongdeungpo-gu, Seoul, 150-809, Korea

Korean Foundation for Quality certifies that The Quality Management System of the above organization has been audited and has complied with the requirements of the following standard

Standard

KS Q ISO 9001:2009 / ISO 9001:2008

Scope of certification

DESIGN, DEVELOPMENT, MANUFACTURING AND SERVICING OF CPP FILM, FLEXIBLE PACKAGING AND THERMAL FORMING CONTAINERS







Jae Ryong Kim
President & CEO, KFQ

The use of Accreditation Mark indicates accreditation in respect of those activities covered by the Accreditation Certificate Number KAB-QC-01 13F, Woolim Lion's Valley B Bld., 371-28, Gasan-Dong, Geumcheon-Gu, Seoul 153-786, Korea

# BUSINESS PROFILE CONTENTS

- ► FLEXIBLE PACKAGE
- ► FILM
- ► MOLDING
- ► PAPER CUPS

#### ► BUSINESS PROFILE







# Flexible package business

By starting from a small printing factory in Dangsan-dong, Yeongdeungpo in 1970s, Yusang is leading the domestic packaging culture, which has developed with Korea's food packaging industry, and is developing further through quality control and new product development for customer satisfaction. We embedded quality control systems throughout the production processes in Gravure printing (one of the best technologies in the flexible packaging business), dry lamination, extrusion coating, non-solvent lamination metalizing, and embossing to meet the requirements of our customes. Yusang provides its products to the largest Korean food processing companies including Lotte, Orion, Nongsim, Paldo, Ottugi, Samyang and Harim and is growing together with the Korean food industry.



### Refrigerated/frozen food packaging



Refrigerated products are normally distributed at a temperature of between -5°C~ +5°C , and frozen products are produced and sold at lower than -18°C. Refrigerated/frozen food packaging requires maintaining the product at a moist environment and a lower temperature, keeping it water-resistant, odorresistant and gas-resistant.

#### Main products

Classification	Packaging product composition	Product features	
Ham/sausage	Ny/PE/LLDPE	Vacuum packaging possible, pin hole resistant	
	PET/PE/LLDPE	Highly heat-resistant, cold-resistant, water resistant, and odor-resistant	
	OPP/VM-CPP	Metal luminosity improves appearance and prevents light penetration	
Ice cream	OPP/PE/W-CPP	Outstanding seal strength	
	OPP/W.O	Outstanding hiding power, outstanding high speed packaging	

# ► Liquid packaging



Because it is important to maintain the quality of liquid products, damp-proof, gas-proof, light-proof, odor-resistant, and gas-resistant materials are used. Liquid food packaging employs an automatic filling system where composite materials such as films especially require outstanding pressure resistant, high speed fillings, and mechanical adapted features.

#### Main products

Classification	Packaging product composition	Product features	
	Ny/LLDPE	Available for sterilization by boiling, outstanding impact strength	
Liquid condiment/	Ny/VM-PET/LLDPE	Damp-proof, outstanding gas-barrier, light-proof	
sauce	Ny/M-LLDPE	High speed filling adapted, better hot-tack sealability through contamination, outstanding gas-resistance	

# FLEXIBLE PACKAGE 1

# Dry food packaging



Dry food is affected by oxygen and water in the air and it requries very good packaging that should be dampproof and have a gas-barrier. Dry food packaging is selected based on the requirements of quality maintenance, printing adaptability and economic efficiency.

#### Main products

Classification	Packaging product composition	Product features
Snacks	OPP/PE/VM-PET/PE/SEAL layer	Outstanding high speed packaging adaptability, Outstanding gas-barrier
	OPP/PE/VM-PET/PE	Outstanding gas-barrier
Biscuits	OPP/VM-CPP	Outstanding gas-barrier, Improves appearance through metal luminosity
	OPP/CPP	Damp-proof, outstanding water-proof, outstanding transparency
Noodles	OPP/PE/VM-CPP	Outstanding gas-barrier, outstanding scratch-resistance
Soups	PET/PE/AL/PE	Damp-proof, outstanding gas-barrier Used for powder condiment packaging
	OPP/PE	Used for dried condiment packaging

## ► Retort food packaging



Retort sterilization is done at 100°C for a certain period of time, and pressured vapor (Steam) or pressured hot water is used in a pressured pot called retort at a pressure range of (1.5~3.0kg/cm²). High retort is done at 135°C for 2 minutes, but retort at 120°C for 30 minutes is more common.

#### Main products

Main products						
Classification	Packaging product composition	Product features				
Sauces	PET/AL/Ny/CPP	Gas-barrier and odor-resistance outstanding				
	PET/Ny/CPP	Transparency satisfactory				
Fresh noodles	Ny/LLDPE	Available for sterilization by boiling				

# ► Cup lid packaging



We select an appropriate sealant material depending on the type of cup. The easy peel packaging is applied to cup noodles packaging.

#### **Main products**

Classification	Packaging product composition	Product features
	Paper/PE/AL/PE/SEAL layer	Used for foaming cups
Cup noodles	Paper/PE/PET/PE/AL/PE/SEAL layer	Used for paper cups
	Paper/PE/AL/PE/EPF	Easy peal outstanding for paper cups
Snacks	Paper/PE/PET/PE/AL/PE/EPF	Easy peal outstanding for paper cups

# ▶ Other product packaging



Rice packaging
Anti-fog lid for cups
Wet tissue packaging

#### Main products

Classification	Packaging product composition	Product features
Rice packaging	MattOPP/Paper/PE PET/LLDPE/Felt	Felt is used to maintain the quality of the rice Non-luminosity improves the appearance
Anti-fog LID	PET/Ny/CPP	Outstanding for cups that require anti-fog qualities
Wet tissue	PET/LLDPE	Outstanding water-resistance and odor-resistance

#### BUSINESS PROFILE <

# 02

## ► Flexible packaging manufacturing equipment

#### **Printing**

We have high-tech printing equipment that enables doublesided, high-quality, high-speed color printing. In particular, the automatic visual inspection device and immobile visual inspection device can monitor printing defects in real-time.

Mashina	Unit	Capa (/year)		
Machine	Unit	m	m²	ton
Printer	4	180,000,000	144,000,000	2,600



#### Lamination

We have a cleanroom where printed paper and functional film is laminated in a minimally contaminated environment. High quality glue, corona processors and ozone processors are used to increase the attachment strength during the lamination process,. Also, an automatic visual inspection screens black dots and foreign contaminants beforehand and removes them.

Madhina	Unit	Capa (/year)		
Machine		m	m²	ton
Laminator	7	300,000,000	240,000,000	10,800



#### Slitting

It slits the produced material to the right width and height depending on the customer's needs and removes dust and foreign contaminants with the installation of an ionizer and foreign contaminant collector.

Machine	Unit	Capa (/year)		
Machine	Onit	m	m²	ton
Slitter	6	270,000,000	216,000,000	13,600



#### **Bagging**

It produces an appropriate three-sided pouch, a standing pouch, and a spout pouch depending on the shape and characteristic of the products to protect them and keep them safe.

	Machine	Unit	Capa (/year)		
		Unit	m	m²	ton
	Pouch Maker	2	18,000,000	14,400,000	900



# Film business

Yusang produces CPP(Cast Polypropylene) film for food package and CPP film for electronic and optoelectronic material protection.

CPP film for food package is applied to the innner layer of the packaging which consists of multi-layers to provide outstanding seal and usability in case of high speed production based on high quality reliability.

CPP film for electronic and optoelectronic material protection, first produced in Korea, is designed to protect materials safely. Yusang protection CPP film is produced under the high quality control process.

Also, Yusang produces vacuum metallized CPP film and vacuum metallized PET film with high quality production machine for various needs from customers.





# MANUFACTURING PROCESS

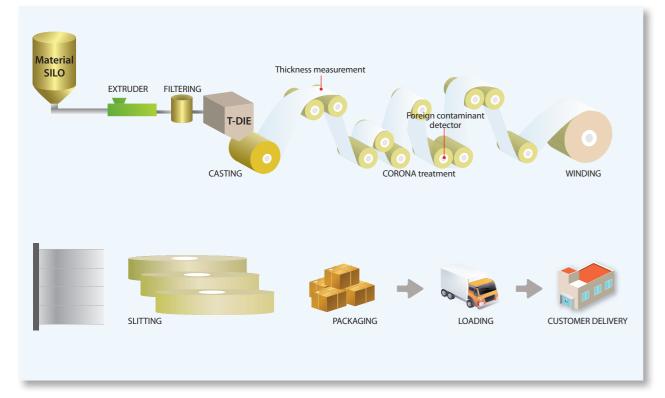






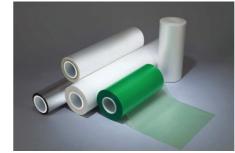
High Vacuum Web Coating Process

#### ► CPP film manufacturing process



# UCF FILM

Purpose		Applicable items	Product grade
	S	Optical film	UCF-MB2 / MB3 / MG2 / MG3 / MF / MY
Electronic material		Optical film , tempered glass, LGP, TSP	UCF-MT / MT2 / MTL / MHLV / MHLT
protection	Display material	Optical film , LGP	UCF-MP/ MP2/ MP3/ MPL/ MPG/ MPGL
		Base film for rubber and acrylic PSA coating	UCF-P / P2 / PB / PG
	Packaging	Food packaging	VM-PET
Industrial	Industrial	Window glass & electronic packaging	VTM-PET
	General	Food packaging (Heat Seal)	UCF
	Ice cream	Food packaging and ice cream (white CPP)	W-UCF W-ULF
	Anti-fogging	Anti-fogging CPP (product requir- ing certain level of freshness)	UCF-AF
		Semi retort pouch	UCF-R
	Bara da sa al	High retort pouch	UCF-R2
Packaging	Retort pouch	High retort pouch	UCF-R3
		High Retort Pouch (White CPP)	UCF-RW
		Packaging that penetrates oxygen and water	VM-UCF
	Vacuum Metallizing	Heat seal vacuum metallized film under low temperature	VM-ULF
		Packaging that requires easy cut with transverse direction	VM-UEB









# ► Electrical material protection CPP film

#### Product structure - 3 layers coextrusion film



#### **Product features**

- Stable and consistent self-adhesion and excellent resistant to temperature
- Well controlled low gel and fisheye
- No residue on materials after peeling off protection film

#### **Product size**

Width: Min.350mm to Max. 1500mmLength: Min. 500M to Max. 7000M

#### Product type - PP(Polypropylene) & PE(Polyethylene)

• PP product : UCF-MB2, MB3, MG2, MG3, MF, MY, MT, MTL, MHL(V,N,T)

• PE product: UCF-MP, MP2, MP3, MPG, MPL, MPGL

#### **Product purpose**

PP type protection film	PE type protection film
UCF-MB2, MG3, MF, MY : Normal Prism Sheet / color filter	UCF-MP: Polarizer TAC film / Color filter
UCF-MB3: Bead Coating(size 1.5μm) Prism Sheet	UCF-MP3: TSP Hard Coating
UCF-MT: TSP(Touch Screen Panel) shipment protection	UCF-MP2, MPG: PC film and plate, glass filter, injection molding LGP protect
UCF-MTL : Mobile Prism Sheet (Matte and backcoating) / ITO film	UCF-MPL, MPGL: PMMA plate (extraction molding LGP protect)
UCF-MHL(3 types): extraction molding LGP pattern surface protection	

### **Product technology information**

#### (TDS) - PP type protection Film

EEATLIDES LINIT		METHOD	PRODUCT											
FEATURES	UNIT	METHOP	MB2	MB3	MG2	MG3	MF	MY	MT	MTL	MHLV	MHLN	MHLT	
Color		Naked eye	Standard sample	Blue	Mild Blue	Green	Mild Green	Fluore- scent	Yellow	Trans- parent	Trans- parent	Trans- parent	Trans- parent	Trans- parent
Thickne	ess	μт	Thickness gauge	50	50	50	50	50	50	50	70	60	60	60
Haze		%	ASTM D1003	40	30	40	40	40	40	10	30	25	25	25
Tensile	MD	Kg/mm²		2.5	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0
Strength	TD	ку/ппп	ASTM D882	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5	1.5
Elon-	MD	%	ASTIVI DOOZ	500	750	500	550	500	500	550	650	600	600	600
gation	TD	70		700	850	700	750	700	700	750	750	750	750	750
Adhesi		g/25mm.90°		2.5	5.0	2.5	2.5	2.5	2.5	2.5	15	20~30	30~40	40~50
strengt (glass pla		g/25mm.180°		1.0	2.0	1.0	1.0	1.0	1.0	1.0	6	10~15	15~25	25~35
Adhesi		g/25mm.90°	VC 41107	5.0	14	5.0	5.0	5.0	5.0	5.0	30	-	-	-
strengt (PMMA sh		g/25mm.180°	KS A1107	2.5	5.0	2.5	2.5	2.5	2.5	2.5	10	120	280	320
Adhesi		g/25mm.90°		4.0	6.0	4.0	4.0	4.0	4.0	4.0	35	-	-	-
strengt (PET FIL		g/25mm.180°		2.0	3.5	2.0	2.0	2.0	2.0	2.0	15	-	-	-
GEL		EA/m <sup>2</sup>	Detector (Dr.schenk)	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA	Under 4EA

#### (TDS) - PE type protection Film

FEATURES Color		UNIT METHOP		PRODUCT						
		UNIT	METHOP	MP	MP2	MP3	MPG	MPL	MPGL	
		Naked eye	Standard sample	Transparent	Transparent	Transparent	Green	Transparent	Green	
Thickne	ess	μπ	Thickness gauge	30	60	40	60	80	60	
Haze	2	%	ASTM D1003	15	15	15	15	25	15	
Tensile	MD	Kg/mm²		2.5	2.0	2.0	2.5	2.0	2.0	
Strength	TD	Kg/IIIII	ASTM D882	1.5	1.5	1.5	1.5	1.5	1.5	
Elon-	MD	%	ASTIVI DOOZ	350	600	300	400	750	500	
gation	TD	90		650	800	700	650	850	850	
	Adhesive g/25mm.9			4.0	5.0	8.0	4.0	15.0	5.0	
streng (glass pl		g/25mm.180°	KS A1107	1.5	2.0	3.5	2.0	5.5	2.0	
Adhesi		g/25mm.90°	NS ATTU/	7.0	6.0	10.0	5.0	20.0	20.0	
streng (PMMA sl		g/25mm.180°		3.0	3.0	4.0	2.5	15.0	7.0	
GEL		EA/m <sup>2</sup>	Detector (Dr.schenk)	Under 10EA	Under 10EA	Under 10EA	Under 10EA	Under 10EA	Under 10EA	



### ► Electronic material protection film -'M' series



The self-adhesive products in the "M" series provide the perfect solution to electronic materials in flat panel display. Because it is important to keep optical material immaculate, we have a filtering system and 3D monitoring equipment to produce the "M" series. Based on the superior quality of the "M" series, we are expanding the protection area from electronic materials to optoelectronic materials.

#### Main products

Items	Usage	Product features
UCF-MB2 / MB3		
UCF-MG2 / MG3	Optical material protection	
UCF-MF / MY	057	- Products that strictly controlled fisheye and gel
UCF-MT / MT2	- PET - Hardcoating PET	- Outstanding resistance to temperature and humidity
UCF-MTL	- Tempered Glass - TSP - ITO film	- Stable and consistent self-adhesion
UCF-MHL-V, N, T	- Polarizer - TAC film	- No residue on materials after removing protection film
UCF-MPG / MPGL	- LGP, LGF	, , , , , , , , , , , , , , , , , , , ,
UCF-MP / MP2 / MP3		

# ► Electronic material protection film -'P' series



"P" series coating film (CPP film for PSA coating) is a complete solution for highly adhesive coating to protect electronic materials. The "P" series are used for acrylic and rubber types of adhesive coating and are highly resistant to heat and solvent to help maintain a high level of adhesiveness.

#### Main products

Items	Usage	Product features
UCF-P,P2	Prism surface protection	- Gel controlled product
UCF-PG	Coating Base Film	<ul><li>Excellent coating properties with PSA</li><li>Excellent solvent resistance and stability after PSA coating</li></ul>
UCF-PB	Diffusion plate protection	- The smoothness of the film is outstanding

## General food packaging (UCF)



Yusang UCF product, one side heat seal film, is a CPP film consisting of 3 layers. UCF film provides excellent workability for packaging lamination.

Especially, W-UCF used for ice cakes has outstanding properties in heat seal and concealment force under low temperature.

#### Main products

Items	Usage	Product features		
UCF	Heat seal film used for food and snack packaging	- Outstanding heat seal and transparency - Excellent workability for packaging lamination		
W-UCF	White color heat seal film for Ice cakes	- Excellent heat seal under low temperature and high speed packaging		

# ► Anti-fogging packaging (UCF-AF)



UCF-AF, a one side heat seal CPP film, is an anti-fogging film and is used for products requiring freshness. UCF-AF protects the contents from condensation caused by temperature differences between the inner and outer part of the packaging. Therefore, it makes it easier to check the contents freshness and extends the expiration date of contents.

#### Main products

Items	Usage	Product features		
UCF-AF 30	Enoki mushroom packaging - automatic packaging production	<ul> <li>Outstanding anti fogging quality</li> <li>Designed to seal by heating under low temperature,</li> <li>it can keep the outside clean after pillow packaging</li> </ul>		
UCF-AF 40	Dried seafood and fresh vegetable packaging - applied to packaging pouch for manual packaging production	- Outstanding anti fogging quality - Excellent workability during manual production process		

# 02

## ▶ Retort packaging (R-UCF)



The casting polypropylene CPP film of the "R" series is used to retort packaging with excellent heat resistance and sealing. In case of retort food, the gas barrier properties are very important. And retort CPP film must keep its seal condition from heat sterilizaion process to delivery.

The Yusang "R" series retort CPP film satisfies these conditions with high quality.

#### Main products

Items	Items Usage		Product features		
UCF-R	Oriental medicine, fruit extract pouch	Lower than 120°C	- High transparency, impulse resistant at low temperature - Excellent resistance to outbreak of pinhole		
UCF-R2	Soymilk, curry, and sauce pouch	Higher than 120°C	- Impulse resistance under low temperature - High temperature sterilizaion		
UCF-R3	UCF-R3 Tuna and cat food pouch		<ul><li>Impulse resistance under low temperature</li><li>High temperature sterilization</li><li>Excellent resistance to outbreak of pinhole</li></ul>		

# ► Vacuum metallized film



The "VM" series have excellent gas barrier properties with high metal gloss. Yusang produces vacuum metallized CPP and vacuum metallized PET applied to structual glass, automobile glass, anti-static electronic material carrier, and general food packaging.

Especially, VM-ULF and VM-UEB films improve productivity and quality of food packaging with outstanding gas barrier properties.

#### Main products

Items	Usage	Product features		
VM-UCF	Snack packaging and confectionery packaging	- Excellent metal gloss with outstanding heat seal - Excellent suitability for lamination		
VM-ULF	High speed packaging (Snack packaging and general confectionery packaging)	<ul> <li>- High speed production packaging applicable</li> <li>- Prevent air leak</li> <li>- Prevent film wrinkle</li> <li>- Excellent heat seal under low temperature</li> </ul>		
VM-UEB	Snack packaging (Easy cut and high barrier)	<ul> <li>Easy cut in TD direction</li> <li>Lowest gas barrier properties among aluminum metallized product</li> </ul>		
VM-PET	Food packaging	- High metal gloss - Excellent in gas barrier properties		
VTM-PET	Electronic parts	- Outstanding stability of optical density		

## Film test equipment



GC-Mass - residual solvent measurement



Multi-tester
- tensile strength and elongation rate measurement



**DSC** - film material analysis



permeability measurement
- film barrier properties measurement



1



Film adhesion measurement

- film adhesive strength analysis



- film friction measurement



Thermo-hygrostat
- reliability measurement of temperature and humidity



**Gloss Meter** - film gloss measurement



Loop Stiffness - film stiffness measurement



Thermal gradient tester

- film heat seal temperature measurement

#### ► BUSINESS PROFILE







# Molding business

# ► PP/PS/PET container

Material	Features	Usage	Product
PS	Impulse strength satisfactory	Ice cream, Pastry tray	Custard, Long leaf pie
Transparent PS	Transparency outstanding	Ice cream container, Pastry cap	Cafepresso
Multi-layer PS	Outstanding oxygen blocking and outstanding damp-proofing	Dairy beverage container	Cantata, Let's be, Latte
PSP	Outstanding heat exchange prevention	Sabalmyeon container	Shinramen, Yugaejang
PP	Impulse strength and outstanding damp-proofing	Ice cream container	Godeureum, Lemonade
PET	Oxygen blocking and outstanding damp-proofing	Snacks Tray	Vegetable crackers

#### **Facility status**

M/	СТуре	Maker	Maximum	Capacity/Day	Sheet	Applicable items
	Equipment 1	SEN BA M/C	1100M/M	30,000 items (5TON)	PP, PS, PET	Pastry Tray, Cap, Pad
Vacuum	Equipment 2	SEN BA M/C	1100M/M	30,000 items (5TON)	PP, PS, PSP, PET	Pastry Tray, Cap, Pad
molding	Equipment 3	SEN BA M/C	1100M/M	40,000 items (7TON)	PP, PS, PSP, PET	Pastry Tray, Cap, Pad
	Equipment 4	токо	1100M/M	40,000 items (7TON)	PP, PS, PSP, PET	Sabalmyeon Tray container
Pressure	Equipment 1	ILLIG	710M/M	50,000 items (5TON)	PP, TransparentPS	Ice cream container, Cap
forming molding	Equipment 2	ILLIG	710M/M	50,000 items (5TON)	PP, Multi-layer PS	Dairy beverage multi-layer container
	Equipment 2	VAN DAM	6 degree printing	30,000 items	PP, PS, PET	
	Equipment 2	VAN DAM	5 degree	25,000 items	PP, PS, PET	
Curved	Equipment 3	VAIN DAINI	printing	13,000-15,000 items	PSP, PET	
surface printing	Equipment 4	Equipment 4 Hobuk Precision	6 degree printing	15,000-17,000 items	PSP, PET	Curved container
pg	Equipment			25,000-30,000 items	PS, PET	
	Equipment 5	Hobuk	6 degree	25,000-30,000 items	PSP, PET	
	Equipment 3	Precision	printing	25,000-30,000 items	PS, PET	
	Assembly equipment 1	Korea gold foil industry		60,000 items		Spoon inserting cap
Assembly	Assembly equipment 2	Korea gold foil industry		60,000 items		Spoon inserting cap
equipment	BODY label equipment	SEICO CL1201		180,000 items		Curved container
	Contraction film equipment	Jeongwoo Mechanics		80,000 items		Curved container







# Paper cups

# ► Paper/ Transparent PS

Materials	Features	Usage	Products	
It prevents a heat exchange by ap- Paper plying Iaminateddouble-layered paper		Instant noodle container (460cc~1,000cc)	Wangttuggeong, Bibimmyeon, Cup noodle, Jin ramen, Ilpumhaemul wangcup	
Transparent PS Transparency outstanding		Ice cream container Pastry Cap	Ojingeoddangkong, Coolhangeudaewa	

#### **Facility status**

Related facilities	Production capacity	Supply items	
2 Cup molding equipment	48CUP/MIN	Ice cream	
2 SET -1000 cup molding equipment	42CUP/MIN		
4 SET -750 cup molding equipment	42CUP/MIN	Instant noodle container	
2 SET-500cc cup molding equipment	42CUP/MIN		
4 Foreign contaminant detectors	180EA/MIN	Instant noodle container	
4 Cup molding equipment	42CUP/MIN, 60CUP/MIN	Regular cup (beverage, snack)	
1 Skive machine	160~200RPM	Anti-fogging, Vacuum packaging	
Inner layer, Outer layer	80~110RPM	Punching equipment	
10 Cup molding equipment	30~40RPM	6.5 ounce beverages	