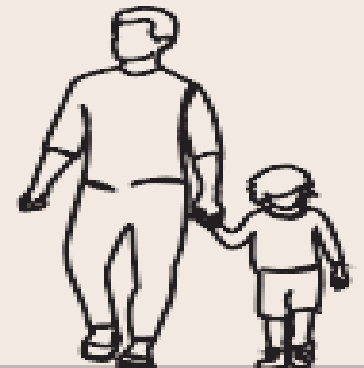


“Global Food - Bio Company”



Part 1

Company introduction



Korea	China	Vietnam	Russia	기타
<ul style="list-style-type: none"> • Sales: ₩1,097.6 billion • Personnel: 1,479 • Main Products: Choco Pie, Poca Chip, Kobuk Chip, Dr. You.. 	<ul style="list-style-type: none"> • Sales: ₩1,270.1 billion • Personnel: 4,275 • Main Products: Choco Pie, O'Gamja, Yegam, Gosomi.. 	<ul style="list-style-type: none"> • Sales: ₩514.5 billion • Personnel: 3,692 • Main Products: Choco Pie, Goute, Swing, Ostar.. 	<ul style="list-style-type: none"> • Sales: ₩230.5 billion • Personnel: 438 • Main Products: Choco Pie, Chocoboy, Whale Bob.. 	<ul style="list-style-type: none"> • Showbox • Bio • Orion Tennis Team

Orion Packaging Factory Status



[Factory location : Inside Banwol Industrial Complex in Ansan-si, Gyeonggi-do]

Factory size

- Production Amount: ₩45 billion/year
- Factory Personnel: 50 (Office Staff 11, Production Staff 39)
- Factory Area: 7,458m² (2,256 pyeong)
- Main Products: Packaging materials for pies, snacks, and jellies
- Equipment Status: 4 printing equipment, 3 processing equipment, 4 slitting equipment, 1 paper bag machine



History

- 1988 Established factory
- 1998 ISO 9002 Certification
- 2002 Established China Packaging Factory
- 2003 Awarded \$5 million Export Tower
- 2017 Acquired AIB Excellent Grade
- 2018 Acquired Korea's First Green Certification for Packaging Materials
- 2023 Acquired Flexo Printing Green Certification
- 2025 Scheduled to Acquire Circular Resource Recognition Certification

* AIB(American Institute of Baking)



Sanitary Quality Control System

- Self-Inspection (Monthly)
- GQAS Audit (Semi-annually)
- AIB Audit (Annually)
- CESCO Pest Control Blocking (4 times a month)
- CVP (Supplier Quality Management)



* GQAS(Global Quality Assurance System)

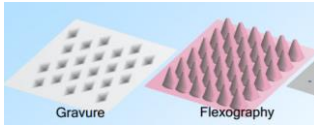
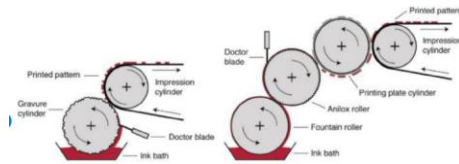
* CVP(Certified Vender Program)

Introduction to Packaging Manufacturing Process

Printing



Gravure Printing



Flexo Printing



Laminating

Co-Extrusion



Non-Solvent



Aging/Slitter

Aging



Slitting



Problems with existing packaging technology

✓ Use of VOC Regulated Substances

- Use of Strong Solvents like Toluene, MEK, EA
- Industries Subject to Environmental Regul



✓ Strong Odor in the Workplace

- Adverse Effects on Worker Health
- Difficulties in Creating a Pleasant Work Environment
- Application of Heavy Copper Plates



✓ Residual Solvent

- Compromises the Safety of Packaging Materials
- Potential for Fatal Harm to Consumers



“Need for High-Quality Packaging Production Technology Without Harmful Elements”

Orion Good Packaging Project

5th Step

Smart Package Project

1차

Packaging Material
Reducing Empty
Space and
Increasing Product
Quantity

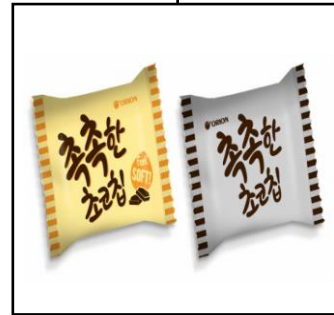
2014년



2차

Eco-Friendly
Simplifying
Design

2015년



3차

Green
(Ethanol Ink)

2017년



4차

Cost-
Effectiveness
(Increased
Quantity)

2018년



5차

Eco-Friendly
Packaging
Project

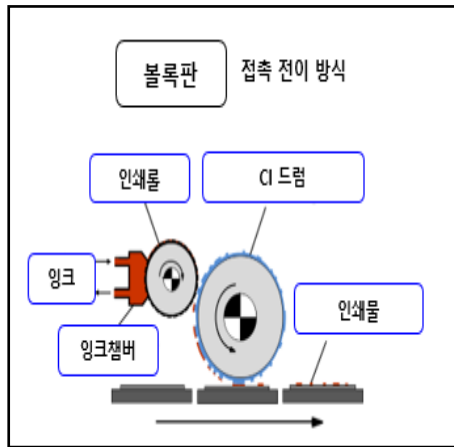
2020년

→ Environmentally Friendly Packaging Production Using Flexo
Printing Equipment

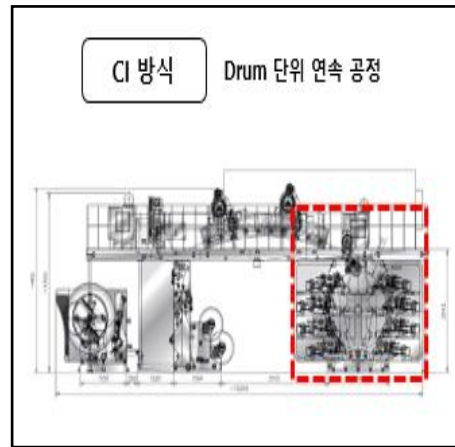
Reduced Ink Usage (Including Solvents,
Approximately 50% Down),
Application of Water-Based Ink



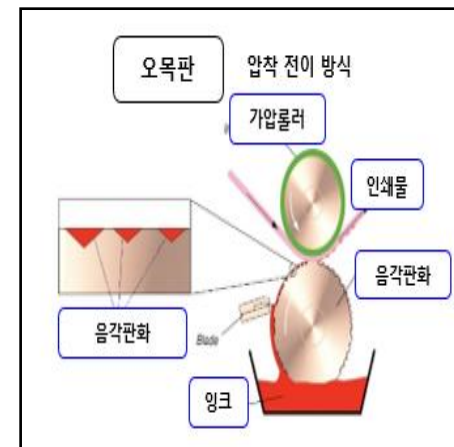
Introduction of Orion's eco-friendly facilities FLEXO



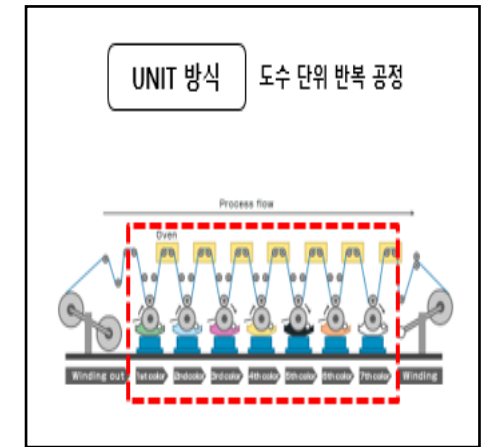
<Printing Principle>



<Printing Process>



<Printing Principle>



<Printing Process>

FLEXO

VS

Gravure

Use of Relief Resin Plate
(Sleeve Attachment Method) → Low Load

Pigment + Water + Alcohol
(No Hazardous Materials)

Suitable for Multi-Product Small-Quantity Production,
Replacement Time (Within 30min)

Printing Plate

Ink

Productivity

Use of Intaglio Copper Plate
(Integrated) → High Load

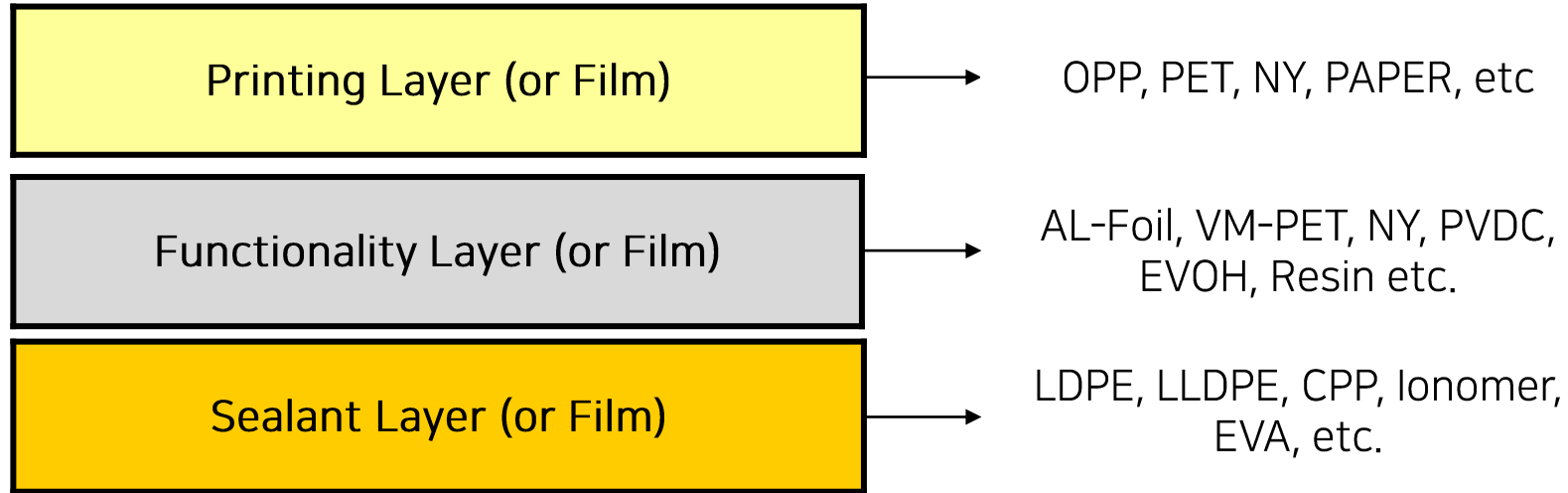
Pigment + Organic Solvent
(Organic Chemical Substance, Hazardous Material)

Replacement Time (60min or More)

**Eco-Friendly Product Production, Improved Working Environment,
50% Reduction in Ink Usage**

Orion Packaging Composition

◆ Basic configuration of packaging



<Orion>

OPP, PET

VM-PET, LDPE

VM-CPP, CPP, LLDPE, M-LDPE, Ionomer



OPP 20

VM-CPP 25



OPP 20

LDPE 15

VM-CPP 25



OPP 20

LDPE 15

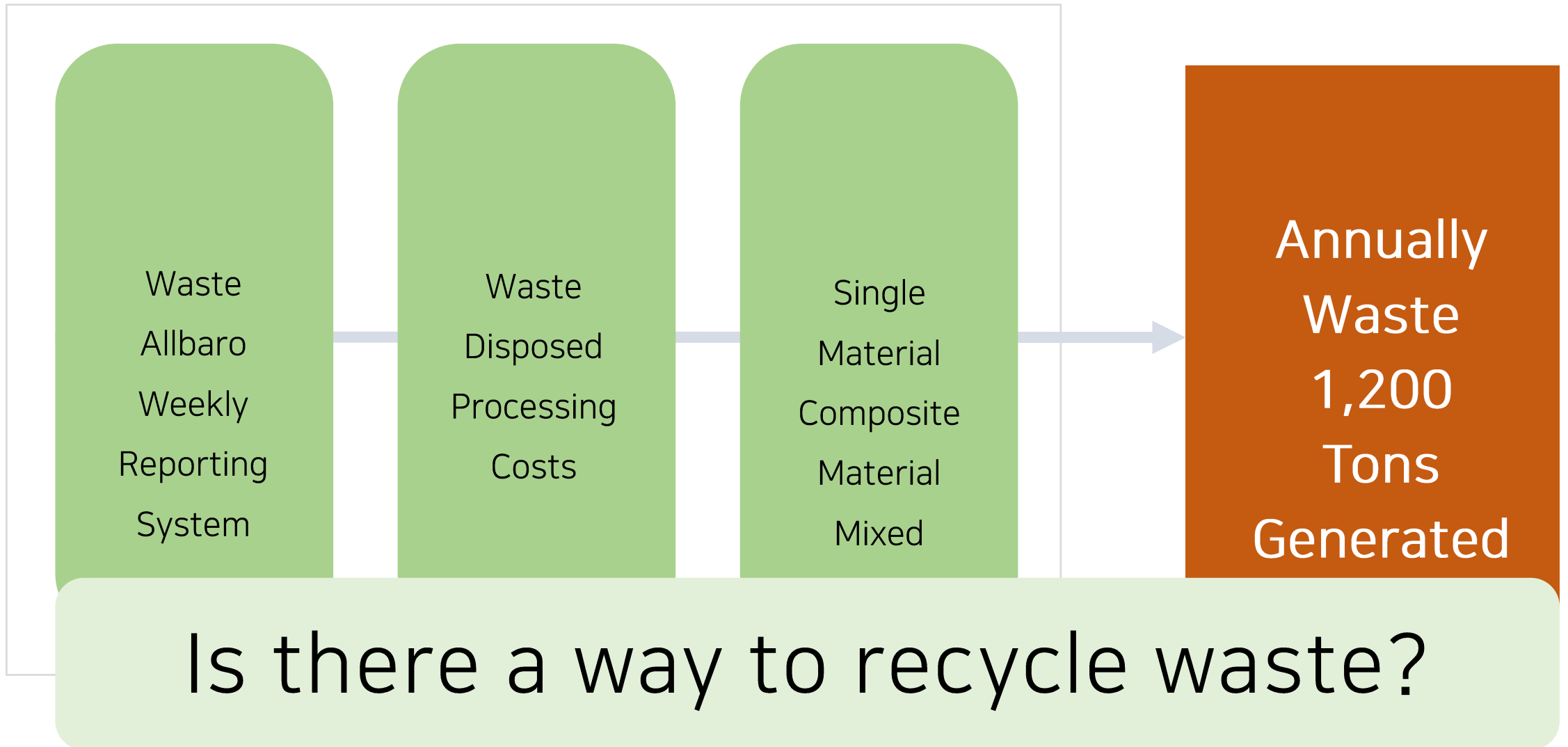
VM-PET 12

LDPE 15

Ionomer 10

※ Even in the case of PP (130~180 °C) and PET (250 ~ 260 °C) with different melting points, they bond together at 320°C ↑ or higher. → Orion products using only PP, PE, and PET are easy to recycle.

Necessity of Circular Resource System



Efforts to Become a Circular Resource



Separation and Disposal by Process Site Workers



Resident Employee in Charge of Separate Collection



Blue Cart: Composite Material (PET Laminated)



Yellow Cart: Single Material (PP/CP)

Annual Waste
Disposed
Approximately
1,200 tons

Korea's First
Composite Material
Circular Resource
Certification

Orion Circulation Resource Certification Results

◆ Acquisition of circular resource certification <2025.05.16>

Reduce Orion waste generation

Realize a circular economy by preventing waste of resources

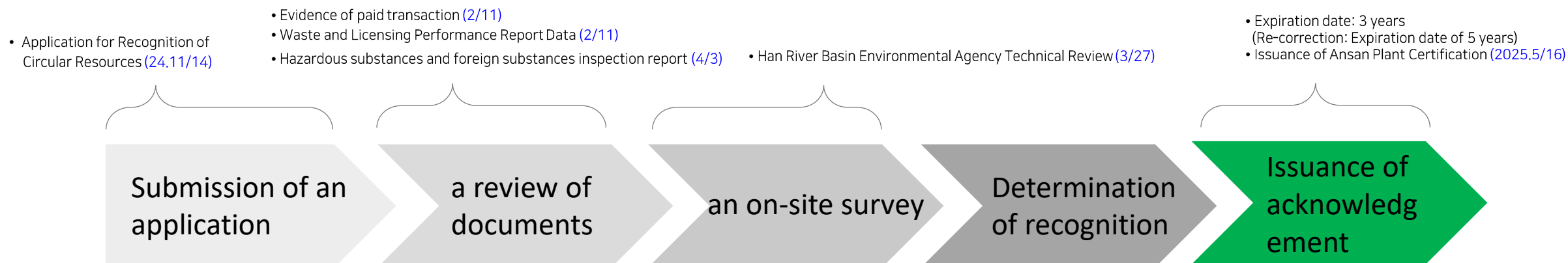


◆ Exemption from waste-related laws and regulations

[Waste Management Act] Regulatory exemption, waste storage, use

No permission and notification required for etc

◆ Orion Circulation Resource Progress Results



Recycle Resource Recycling Process

- ◆ Collaborate with recycling companies for growth
 - Recycling company raw material production process

Step 1



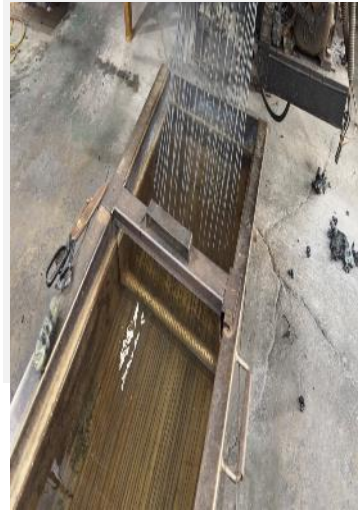
< Put in packaging materials >

Step 2



< Melt >

Step 3



< Cooling >

Step 4



< Cutting off >

Step 5



< Raw materials >

Recycled resource recycling items



<PE 원료>

Recycling with Mulching Vinyl

- ※ Utilization: Vinyl covering the soil in agriculture
- ※ Function: Weed suppression, soil temperature control, Prevention of insect pests and increased yields

Recycled resource recycling items

Colored plastic product raw materials
(Master Placement)

- ※ Utilization: Plastic used in colors
- ※ Type: Storage container, color bottle lid, Engine oil container, etc



<PE 원료>

Recycled resource recycling items



<단일재질 원료>

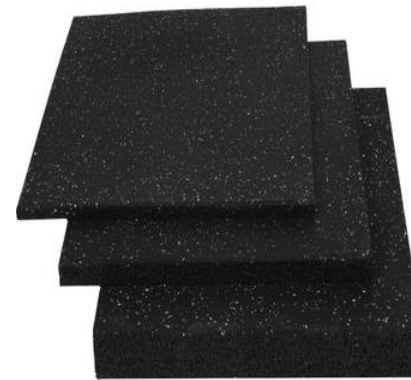
pallets, egg plates, and
potted plants Recycling

- ※ Utilization: Black plastic products
- ※ Type: PP material black pallet, egg plate
a black pot container

Recycled resource recycling items

Parking blocks, floor noise supplements,
Drainage recycling

※ Utilization: Use of subsidiary materials as construction materials
※ Type: Parking blocks, floor noise supplements when constructing apartments, a drainage channel



<복합재질 원료>

The direction of Orion



eco-friendly
equipment
100%

Packaging material
with a single
material
the direction of
production



Thank you.