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**KUMAH STEEL**

**Global Solutions,  
Green Future**

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# Greetings

## A Company That Always Stands by Its Customers

Hello, This is Cho Seung-je, Chairman of KUMAH STEEL Co., Ltd.

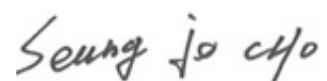
As the saying goes, "Though the beginning is humble, the end will be prosperous."

KUMAH STEEL took its first step with passion as its only capital. Despite countless challenges in the early days, our employees' spirit of challenge and the unwavering support of our customers have enabled us to secure a leading position in the home appliance steel industry.

Keeping pace with global trends, KUMAH STEEL has supplied high-quality steel products that meet the demands of the international market and has achieved multiple Export Tower Awards in recognition of its performance. Yet, we are not content with these accomplishments. Through continuous technological innovation, including the development of eco-friendly and high value-added steel materials, we are committed to leading the future of the steel industry.

We will continue to embrace the changes in the global steel market as opportunities for greater growth, and we will do our utmost to exceed customer expectations at every step.

Thank you for your continued trust and support.



## Company Overview

**Company Name**  
KUMAH STEEL Co., Ltd.

**Date of Establishment**  
December 2001

**Main Business**  
Manufacturing of steel products

**Corporate Motto**  
Make it possible if it seems impossible.

# History

**1998 ~  
2006**

- 1998. 02.**  
Established KUMAH Steel
- 2001. 12.**  
Incorporated as  
KUMAH STEEL Co., Ltd.
- 2002. 01.**  
Established 1st Plant
- 2002. 05.**  
Registered as Partner  
Company of LG Electronics

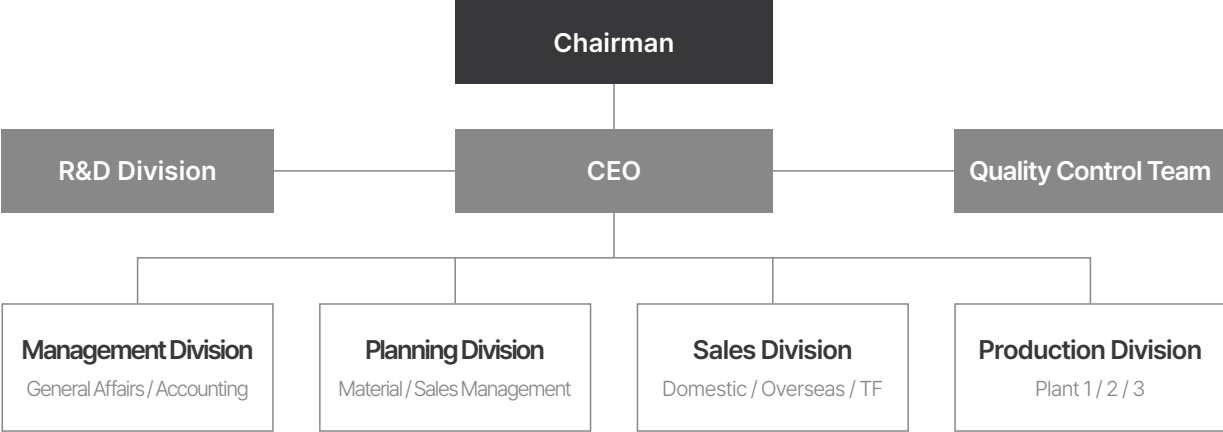
**2006 ~  
2016**

- 2006. 05.**  
Established 2nd Plant
- 2008. 11.**  
Patent Registered for BOTH  
EMBOSS LINE
- 2010. 12.**  
Awarded the 10 Million Dollar  
Export Tower
- 2012. 12.**  
Awarded the 70 Million Dollar  
Export Tower
- 2015. 08.**  
Established Malaysia Subsidiary
- 2016. 01.**  
Signed MOU for Malaysia  
National Housing Project

**2017 ~  
Today**

- 2017. 01.**  
Developed Bimetal Clad Steel  
Material Technology
- 2018. 02.**  
Commenced Test Production of  
Bimetal Clad Steel Sheets
- 2020. 02.**  
Completed Development of  
Spot/Joint Bonding New Material
- 2021. 10.**  
Established 3rd Plant
- 2023. 12.**  
Commenced Operation of 3rd  
Plant Facilities
- 2024. 12.**  
Awarded Export Contribution Tower
- 2025. 05.**  
Received Prime Minister's  
Commendation for SME Contribution
- 2025. 09.**  
Received Minister's Award for  
Technological & Managerial  
Innovation in SMEs

# Organization



# Location



Head Office & 1st Plant



2nd Plant



3rd Plant



Ocheok Plant



Gimhae Plant



Welfare & Education Center

# Items Handled

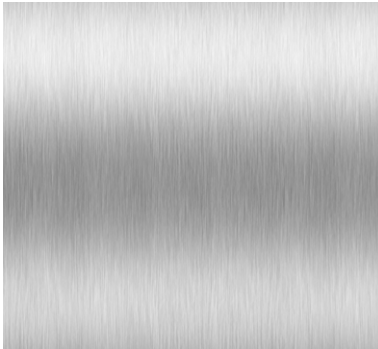
## Cold Rolled Steel Sheets (CR, EGI, GI, PCM, VCM)



## Hot Rolled Steel Sheets (PO, HR, HGI, GA)

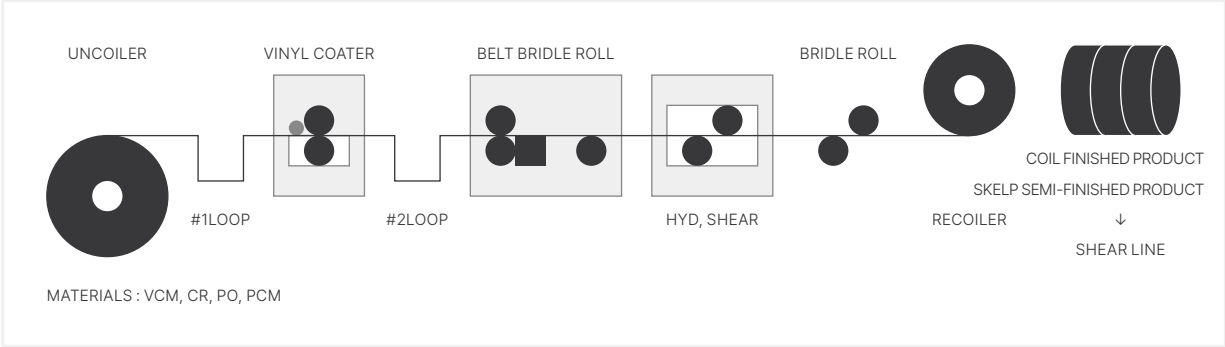


## Non-Ferrous Metals (STS, Copper, Aluminum, etc.)

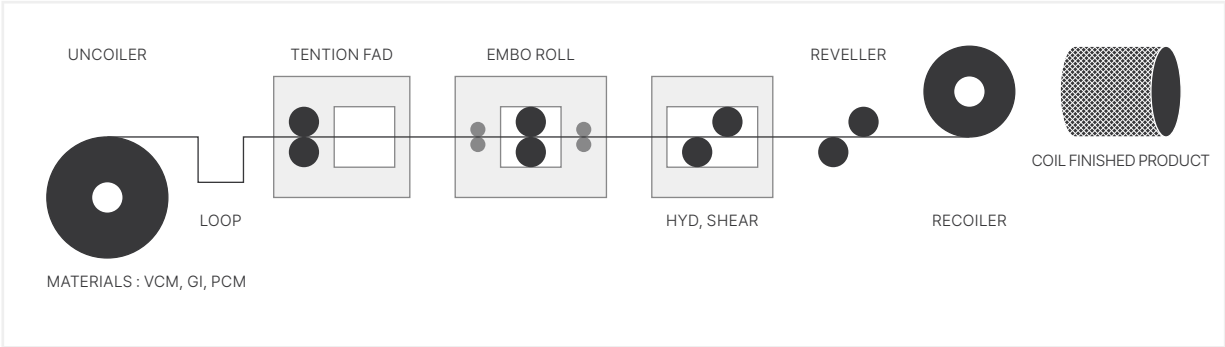


# Processing Line

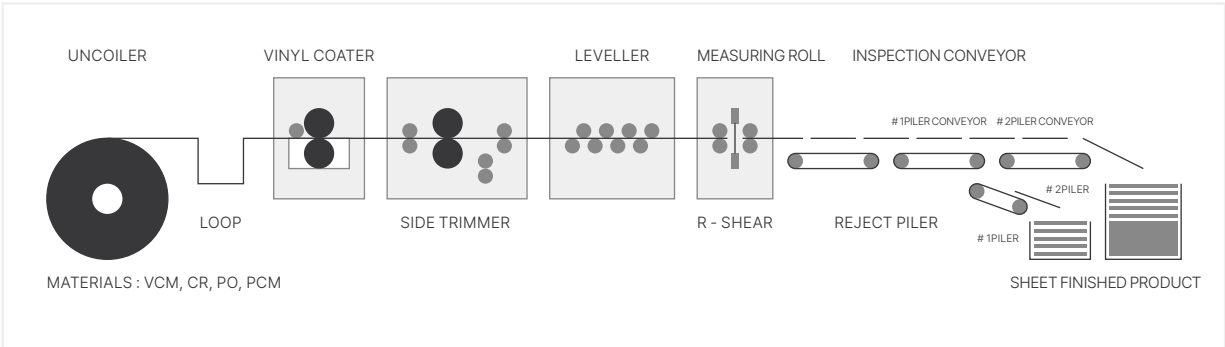
## SLITTER



## EMBO



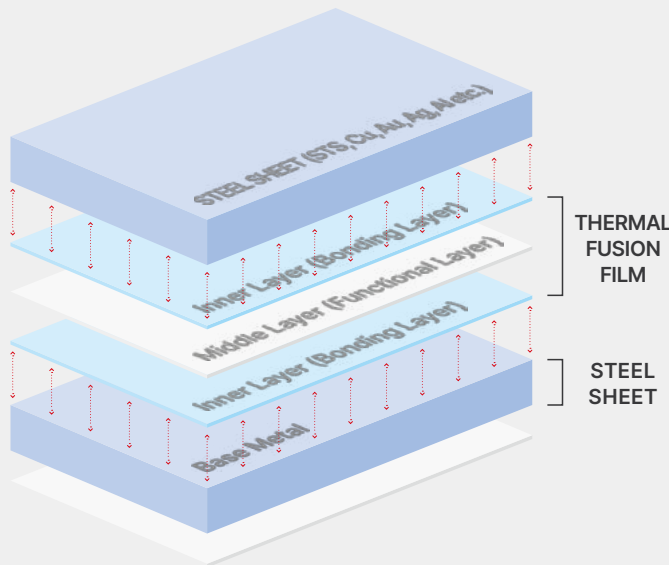
## SHEAR



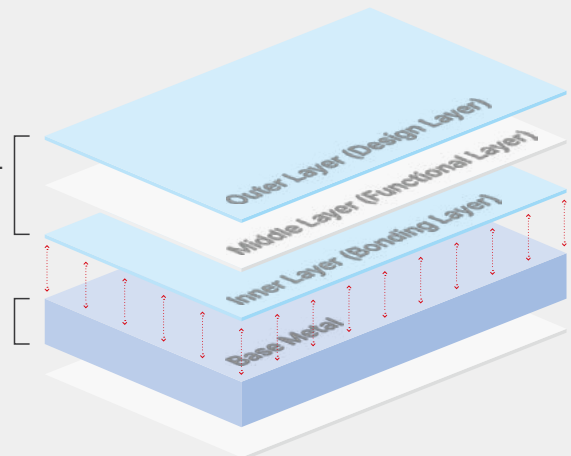
# KES K-ECO STEEL

## Brand Introduction & Features

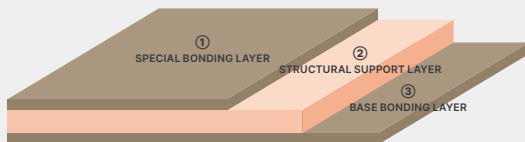
### BIMETAL CLAD STEEL SHEET



### DOUBLE-SIDED LAMINATED STEEL SHEET



### FILM FOR BIMETAL CLADDING (THERMAL FUSION CPET FILM)



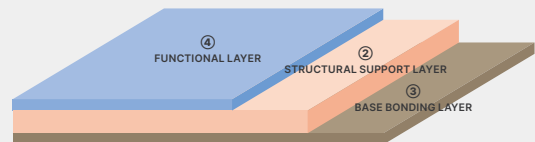
**① SPECIAL BONDING LAYER**

Thermal fusion layer for bonding dissimilar or similar steel sheets

**② STRUCTURAL SUPPORT LAYER**

Provides barrier and stretching functions, supports film structure, may include functional additives such as aluminum powder.

### FILM FOR DOUBLE-SIDED LAMINATION (THERMAL FUSION PRINTABLE CPET FILM)



**③ BASE BONDING LAYER**

Bonds to metal surface through thermal fusion without adhesives; provides dual bonding (melting + hydrogen bonding).

**④ FUNCTIONAL LAYER**

Printable layer with barrier properties, excellent mechanical strength, and adjustable surface hardness to meet diverse customer needs.

KUMAH STEEL's KECOSTEEL (Korea / Kumah / Eco / Combine) has been developed based on high value-added, eco-friendly surface treatment technology that utilizes specialized bonding and adhesion materials. This technology is applicable to a wide range of industries, including home appliances, interior construction materials, and consumer goods, and offers significantly improved adhesion strength and processability compared to conventional products.

## Conventional Process



## Eco-Friendly Process

**STEP 01 Uncoiling**

Process for mounting and feeding the coil into the line.

**STEP 02 Pre-treatment**

Removes oil and surface contaminants from the coil and improves adhesion and corrosion resistance through chemical treatment.

**STEP 03 Coating**

Applies adhesive on the outer surface and paint on the inner surface; process repeated for both sides.

**STEP 04 Oven Drying**

High-temperature curing for both inner and outer surfaces; cannot laminate both sides simultaneously, requiring repeated drying that increases CO<sub>2</sub> emissions and affects product quality.

**Repeated Chemical Treatment 2-3 Times**

**STEP 09 Lamination**

Laminates PVC or PET film on one side of the sheet.

**STEP 10 Cutting**

Cuts the laminated product into sheet form.

**STEP 01 Uncoiling**

**Simplified, Eco-Friendly Process**

**STEP 02 Thermal Fusion & Cooling Wash**

**STEP 03 Cutting**



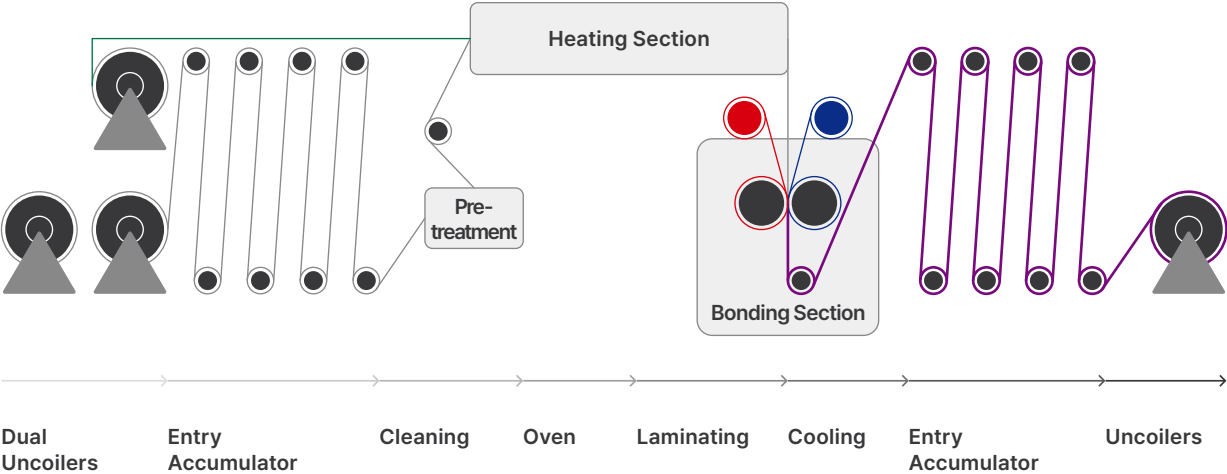
- ✗ Tens of meters of chemical processing lines
- ✗ 24-hour solvent-based drying operation
- ✗ Pollutant treatment process such as RTO system
- ✗ Energy consumption equals carbon emissions

- ✓ No Chemical Process
- ✓ Production Equipment Reduced by 70%
- ✓ Energy Use Reduced by 75%
- ✓ CO<sub>2</sub> Emissions Reduced by 75%

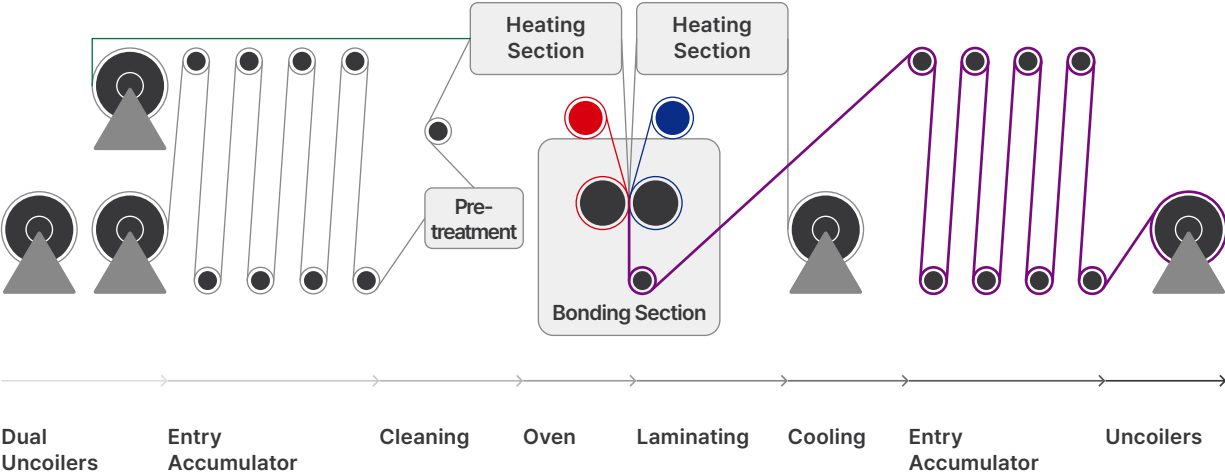
# KES K-ECO STEEL

## Manufacturing Facilities & Processes

### Filme Clad Line



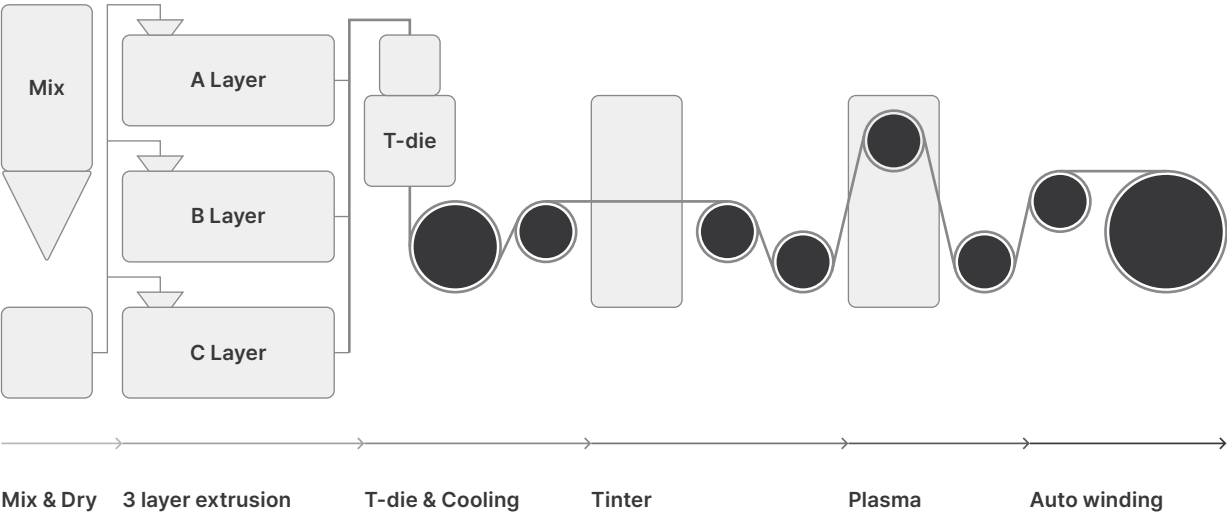
### Metal Clad Line



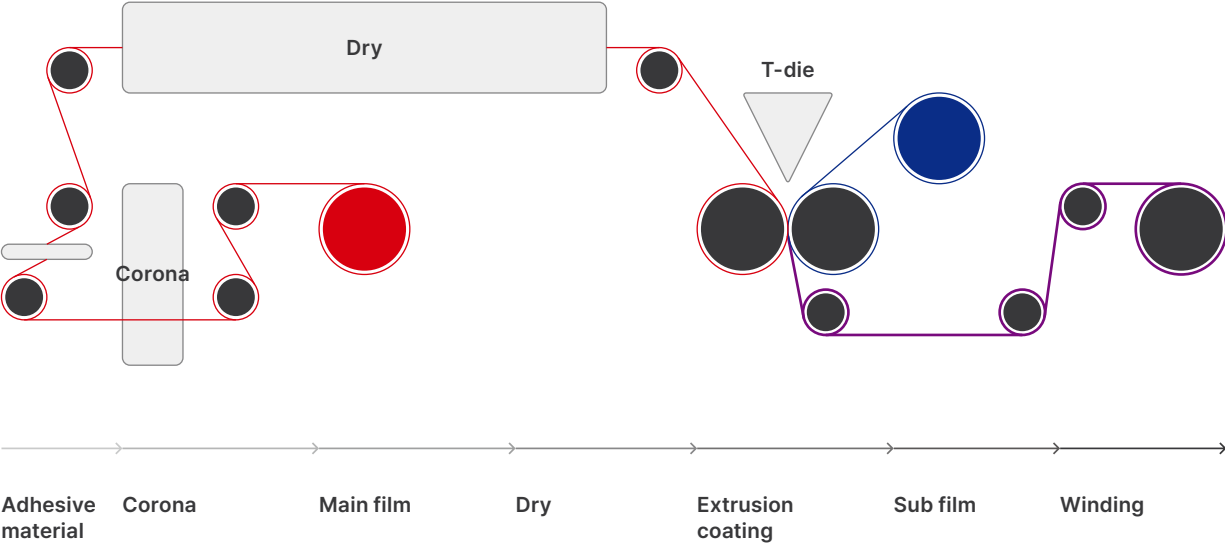
# K-ECO STEEL

## Manufacturing Facilities & Processes

### CPET Film Production Process



### Film Lamination and Coating Process



## Product Usage Purpose

### Home Appliance Interior & Exterior Materials

KUMAH STEEL supplies high-quality steel sheets to major home appliance manufacturers with stable and reliable delivery, earning strong customer trust. We continuously develop various materials tailored to customer needs, and through structural research focused on vibration and noise reduction, we have achieved superior performance and quality compared to conventional color-coated steel sheets.



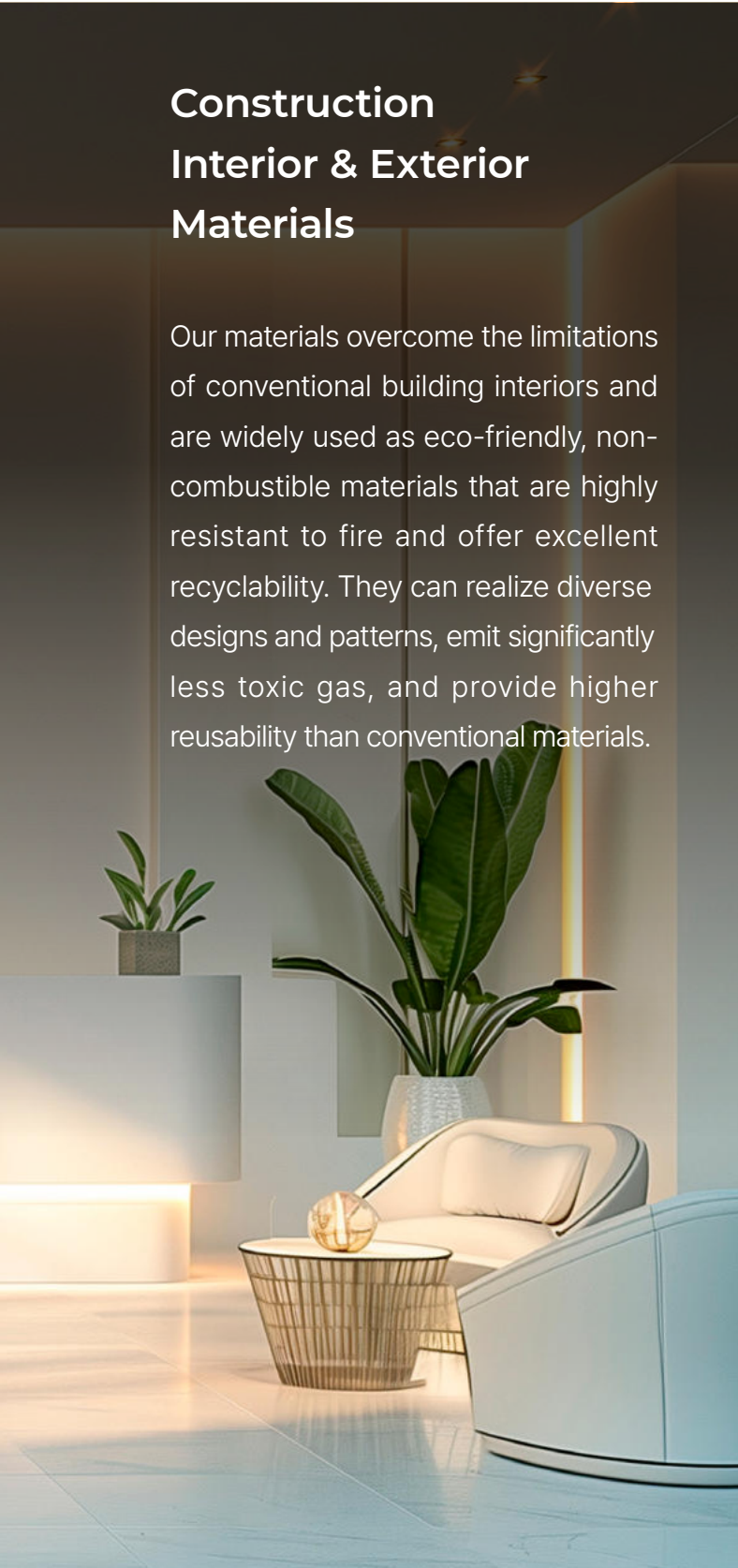
### Shipbuilding / Automotive Interior & Exterior Materials

Using high-strength steel plates, we meet the demanding requirements of shipbuilding and automotive manufacturers, producing products that ensure safety, durability, and reliability. Through a wide range of specifications and certified quality standards, we maintain strong competitiveness in global markets.



## Construction Interior & Exterior Materials

Our materials overcome the limitations of conventional building interiors and are widely used as eco-friendly, non-combustible materials that are highly resistant to fire and offer excellent recyclability. They can realize diverse designs and patterns, emit significantly less toxic gas, and provide higher reusability than conventional materials.



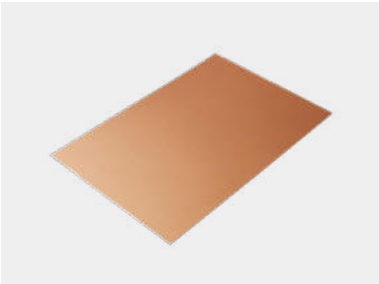
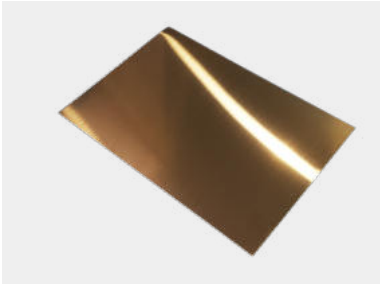
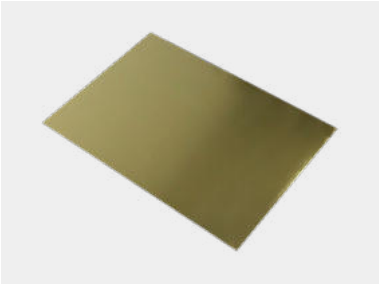
## Eco-Friendly Alternatives to Plastic for the Food Industry

We have developed environmentally friendly steel materials capable of replacing plastic used in the food industry. These materials are ideal for food packaging, tableware, and food processing equipment, maintaining their form even under high temperature and pressure. They effectively preserve food freshness and are recyclable, making them a sustainable and eco-conscious alternative to conventional plastic products.

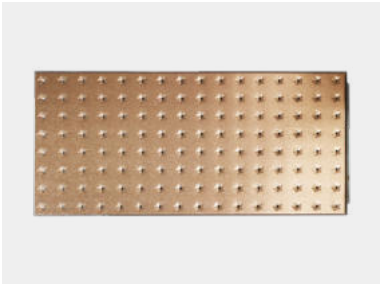


# Application Cases

## Exterior and Interior Base Materials



## Processed Base Material Products



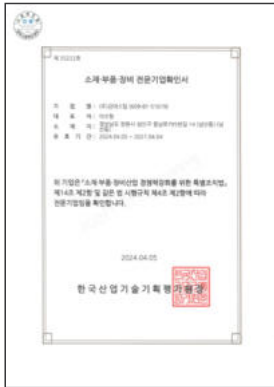
### Ships, Automobiles, Trains, Fire Hydrants



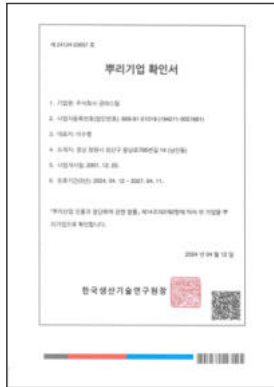
### Reusable Cans, Food Cans, Home Appliances, Batteries, Automotive Trays, Military Equipment



# Certificates



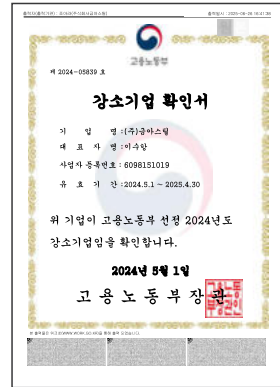
Material, Parts & Equipment  
Specialized Company Certificate



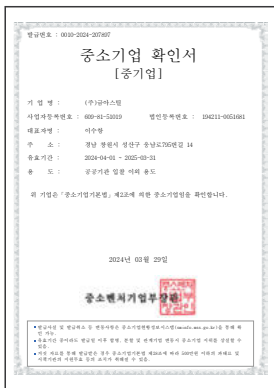
Root Industry Certificate



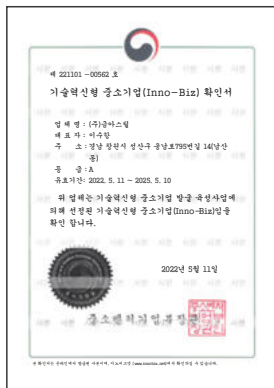
Certificate of Corporate  
Research Institute



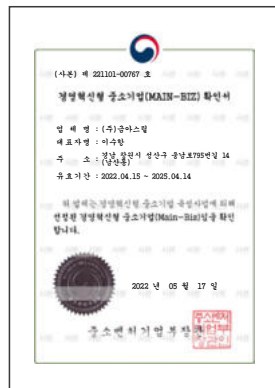
Strong Small Enterprise  
Certificate



SME Verification Certificate



Inno-Biz Certification



Main-Biz Certification



Export Tower Award  
Certificate



ISO 9001 Certificate



ISO 14001 Certificate



ISO 45001 Certificate



SGS Certification

# Patent Certificates



Domestic Patents  
Embossing Forming Method



Domestic Patents  
Embossing Forming  
Apparatus



Domestic Patents  
Heat-Attached PET Film



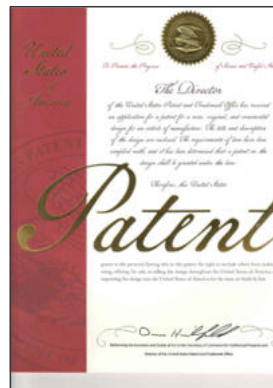
Domestic Patents  
Copper-Clad Metal Plate



Domestic Patents  
Bimetal Clad Steel Sheet



Domestic Patents  
Low-Temperature Heat-  
Attached Interior Film



U.S. Patent  
OPA21-0039-US



U.S. Patent  
OPA21-0042-US



Japan Patent  
OPA21-0040-JP



Japan Patent  
OPA21-0043-JP



China Patent  
OPA21-0044-CN



India Patent  
OPA22-0002-IN

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