DESIGN MEETS PERFORMANCE. MATERIAL BONDING.

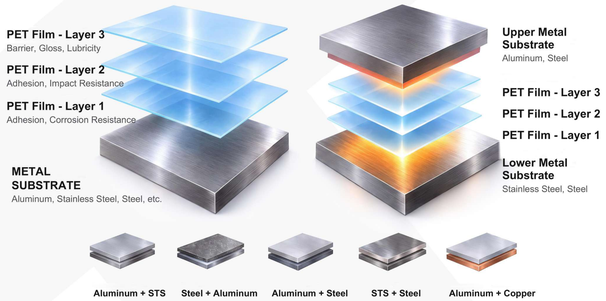
Performance beyond the visible design

K·ECO STEEL'S

THERMAL LAMINATION

ENABLES DISSIMILAR-METAL BONDING

Functional films and thermal lamination enable the joining of dissimilar metal substrates, including steel, stainless steel and aluminum. Material combinations can be engineered to meet product requirements for weight, strength, thermal properties and surface performance.



DISSIMILAR MATERIAL JOINING

Combines different metal substrates

ADHESIVE-FREE / SOLVENT-FREE

No adhesives or solvents used

Functional material design combines the properties of different materials to meet product-specific requirements.

K·ECO STEEL

MORE FUNCTION LESS IMPACT
GREATER FUNCTION, LOWER ENVIRONMENTAL IMPACT

INNOVATION PREMIER 1000	U.S. PATENT	INNO-BIZ
GLOBAL SMALL GIANT	JAPAN PATENT	MAIN-BIZ
GREEN TECHNOLOGY CERT.	CHINA PATENT	ISO 14001
PRIME MINISTER'S COMMENDATION	INDIA PATENT	ISO 45001
MINISTERIAL COMMENDATION	KOREA PATENT	ISO 9001

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DESIGN
FUNCTION
SUSTAINABILITY

DESIGN MEETS **FUNCTION**

K·ECO STEEL

HOME APPLIANCE

Design and function, united
Functional metals for
next-generation appliances



K·ECO STEEL

WHY K·ECO STEEL?

K·ECO STEEL HOME APPLIANCE

Eco-friendly PET films incorporate colors, patterns, graphics and textures to create premium finishes on steel, stainless steel and other metals. The material also supports the formability required for sophisticated appliance shapes.

DESIGN FLEXIBILITY

Versatile appliance designs created with functional films

PREMIUM SURFACE

Beyond appearance, engineered surface performance

VIBRATION DAMPING

Functional materials that reduce vibration and noise

MULTI-MATERIAL DESIGN

Combining material properties with design

K·ECO STEEL DISTINCTIVE ADVANTAGES

DESIGN
FUNCTION
SUSTAINABILITY

www.kumah.co.kr

HOME APPLIANCE

DESIGN FLEXIBILITY

Flexible Design for Appliances

K·ECO STEEL applies dissimilar metals or functional films selectively to the surfaces that need them. Colors, patterns, graphics and textures create a wide range of visual finishes. Surface appearance can be combined with the properties of different metals to broaden material choices. Materials and designs can be tailored to product concepts, supporting both distinctive design and efficient material use.

COLOR & GRAPHIC Diverse colors and graphics through film printing

PATTERN Metal, wood and stone-inspired surface patterns

TEXTURE & FINISH Varied textures and finishes through film design

CUSTOM DESIGN Customized design for customer and product concepts



FUNCTIONAL SURFACE

Functional Surfaces Beyond Design

K·ECO STEEL's eco-friendly films combine authentic visual design with a functional layer that protects metal surfaces. Film design can be tailored to the application and service environment to enhance surface durability and corrosion resistance.

FUNCTIONAL FILM Design and function in a single film

SURFACE PROTECTION Protects metal surfaces from contamination and wear

CORROSION PROTECTION Barrier layers support durability and corrosion resistance

FUNCTIONAL PLATFORM Extends to functional panels for interiors and exteriors



Design Meets Function



Beyond Appearance



Diverse Surface Designs



Design Meets Functional Performance

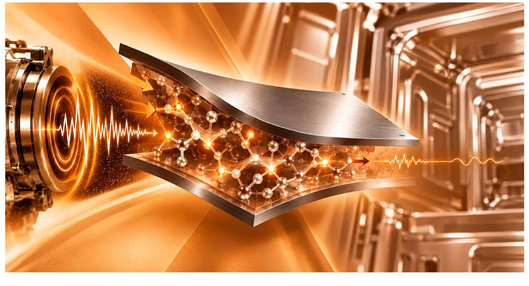
VIBRATION DAMPING

Damping Technology for Vibration and Noise

A layered structure with functional films or damping layers between metals can combine vibration damping with material properties. It can be applied to NVH improvement in appliances, including washing machines, dryers, refrigerators, air-conditioner outdoor units, motors and compressors.

VIBRATION DAMPING Functional interlayers attenuate vibration energy

NOISE REDUCTION POTENTIAL Materials for vibration and noise reduction in panels, covers and cases



MASS PRODUCTION

Mass Production Enabled by Continuous Processing

KUMAH STEEL has established a mass-production foundation for continuously applying functional films to coil-form metal through roll-to-roll continuous thermal lamination production equipment.









