

Companyprofile

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01 COMPANY PROFILE



Company NEWCHEM

Foundation Jan. 6, 1999

Address 44-5 , Ungji-ro, Tanhyeon-myeon, Paju-si
Gyeonggi-do, Rep. of Korea

Business Line

- Silkscreen Printing Ink (Glass, Metal, Acrylic, etc)
- Nano-Coating Materials
- Special Ink/Paint & Resin Development & Manufacture

Main Product

- Minerva Series
- Poseidon Series
- Glasstherm Series, ect
- Aura series
- Other Coating Products

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History



1999 NEWCHEM Inc. is established in Jan. 6, 1999.

2000 • The contract with Drom Fragrance corp. in German to be the executive distributor in Republic of Korea.

2001 • Develop MINERVA, GLASSTHERM. (Coating materials for bottles, glasses & ceramic)

2003 • Appointed as small and medium enterprise for export agent through EMCS by Small and Medium Business Administration
• Develop & synthesis high weatherability & chemical resistance polymers.
• Appointed for “manufacture of flat glass coating”,
“Business feasibility evaluation for New Technology Idea” by Korea Technology Transfer Center

2004 • LG electronics adopted NewChem Ink for Home Appliances(DIOS refrigerator)
- Marine Blue, Brown, Irish Silver, Mocha Brown etc
• Samsung electronics adopted NewChem Ink for Air-condition (HAUZEN)

2005 • Develop “POSEIDON”, the water soluble coating material for colored glass.
• LG Electronics adopted New Chem Ink for Whisen Air-condition

2007 • Selected as a design developer by the Home Appliances Design Department
• Develop “MINERVA-LIGHT”, a multi-purpose coating material.
• Samsung Electronics adopted New Chem products for design and color development

2008 • New color development of air-conditioner for LG Electronics.
- Hasanglim, Cocored, Merrygoldred, Pionared, Pionawhite etc.

2009 • Completion of new building & relocation.(44-57, Ungji-ro, Tanhyeon-myeon, Paju-si, Gyeonggi-do, ROK)
• Setting a full size silk printing system.(Semiautomatic printer, Box oven, IR Dry conveyor M/C)

2010 • Registered as a venture company by KIBO.
• Established the Institute of Technology.
• Design partner of Samsung Electronics in the Home Appliances Design Department.

2011 • Selected as design developed by Daewoo Electronics Home Appliances Department.
• Registered for patent on ink and 4D printing technique.(Patent No.10-1193560)
• Registered for patent on printing technique using satin glass.(Patent No.10-1061509)
• Developed the anti-fading ink in foaming.

- 2012**
- Registered for patent on 3D scattered reflection printing technique on glass.(Patent No. 10-178113)
 - Design and color development of Kimchi refrigerator in the second half of 2012, Samsung
 - Design and color development of Kimchi refrigerator for DAEWOO electronics.
 - Design and color development of refrigerator bound for Middle east, South-east Asia, West-south Asia in 2013, Samsung.
 - Design and color development for refrigerator of Samsung in the first half of 2013.
 - DESIGENCE Inc. is established in Aug. 1, 2012. - Design Company
- 2013**
- Design and color development of Kimchi refrigerator of Samsung in the second half of 2013.
 - Design and color development of Oven and Microwave of Samsung
 - Participate in Samsung Mobile Window, Battery development
 - Participate in Design and development of Samsung Winecellar
 - Design and color development of refrigerator of Samsung bound for East-south Asia.
 - Color Ink development for steel material(SUS,steel plate etc)
- 2014**
- Color development for local refrigerator of Dongbu Daewoo electronics
 - Color development of microwave of Dongbu Daewoo electronics bound for Mexico.
 - Pattern and color development of refrigerator of Panasonic
 - Pattern and color development of Jinheung refrigerator
 - Color development of Smart induction underrange.
 - Color development of Samsung Winecellar
 - Color development of microwave of Samsung bound for West-south Asia.
 - Color development of air-condition foothold of Samsung
 - Color development of refrigerator of Samsung
- 2015**
- Color development of local refrigerator of Dongbu Daewoo electronics
 - Color development of Kyung Dong Navien Lobbyphone.
 - Color development of refrigerator of Dayou Winia.
 - Pattern and color development of kitchen table of Hansam
 - Developmend of glass block to guide no-smoking campaign.
 - Color development of air-condition foothold of Samsung
 - Color development of refrigerator of Samsung
 - Color development of microwave of Samsung bound for West-south Asia
 - Color development of microwave of Samsung bound for Russia.
 - Participated in IMAC 2015(International Material & Components Industry Show).

History



- 2016**
 - Pattern and color development of Midea refrigerator
 - Color development of Mitsubishi refrigerator
 - Color development of Sharp Corporation refrigerator (Exclusive ink application)
 - Color development of Toshiba washer
 - Color development of Sooin cosmetic mask pack tin case
 - Color development of Sunil Safes (Lucell series)
 - Color development of Hyundai Elevator (Hyundai Elevator Innover series)
 - Development of glass block to guide no-smoking campaign.
 - Color development of Interior materials for construction (glass, metal) _GS E & C, Livart

- 2017**
 - Color development of microwave of Samsung
 - Color development of refrigerator , Kimchi refrigerator of Dongbu Daewoo electronics
 - Color development of refrigerator of Sharp Corporation bound for Russia.
 - Color development of AQA refrigerator
 - Development of glass block to guide no-smoking campaign.
 - Color development of Interior materials for construction (glass, metal) _GS E & C, Emons, Hanssem

- 2018**
 - Color development of airdresser of Samsung
 - Color development of microwave of Samsung bound for West-south Asia
 - Pattern and color development of clothes purifier of Coway in 2018
 - Color development of Dimchae Kimchi refrigerator of Dayou Winia
 - Color development for SUS of Sunil Safes (Lucell series)

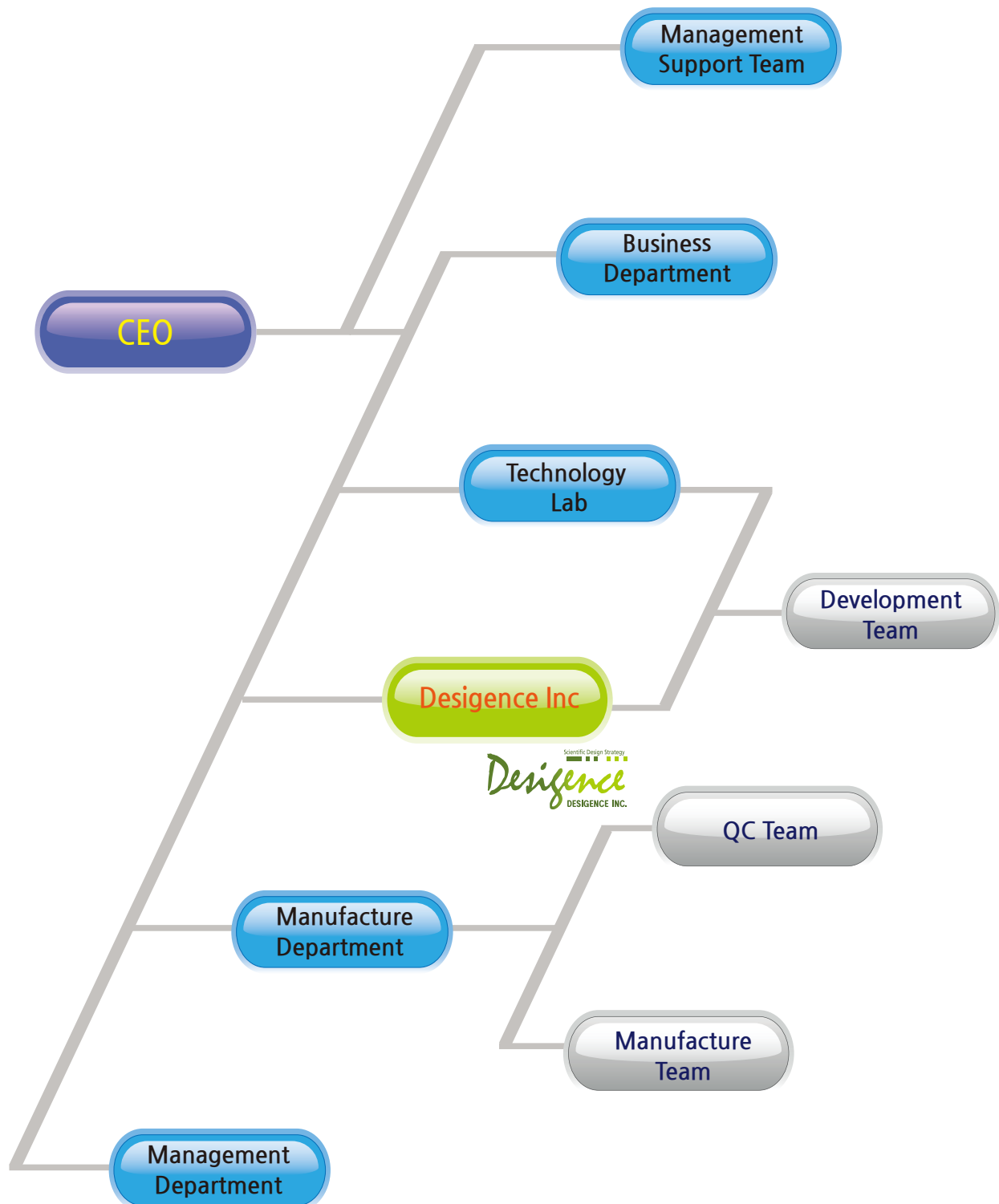
- 2019**
 - Color development of BESPOKE refrigerator of Samsung in 2019
 - Color development of induction controller of Samsung bound for North America
 - Color development of BESPOKE dishwasher of Samsung
 - Color development of BESPOKE microwave of Samsung
 - Color development for deposited glass of airdresser of Samsung
 - Pattern and Color development of clothes purifier of Coway in 2019
 - Color development of Dimchae Kimchi refrigerator of Dayou Winia in 2019

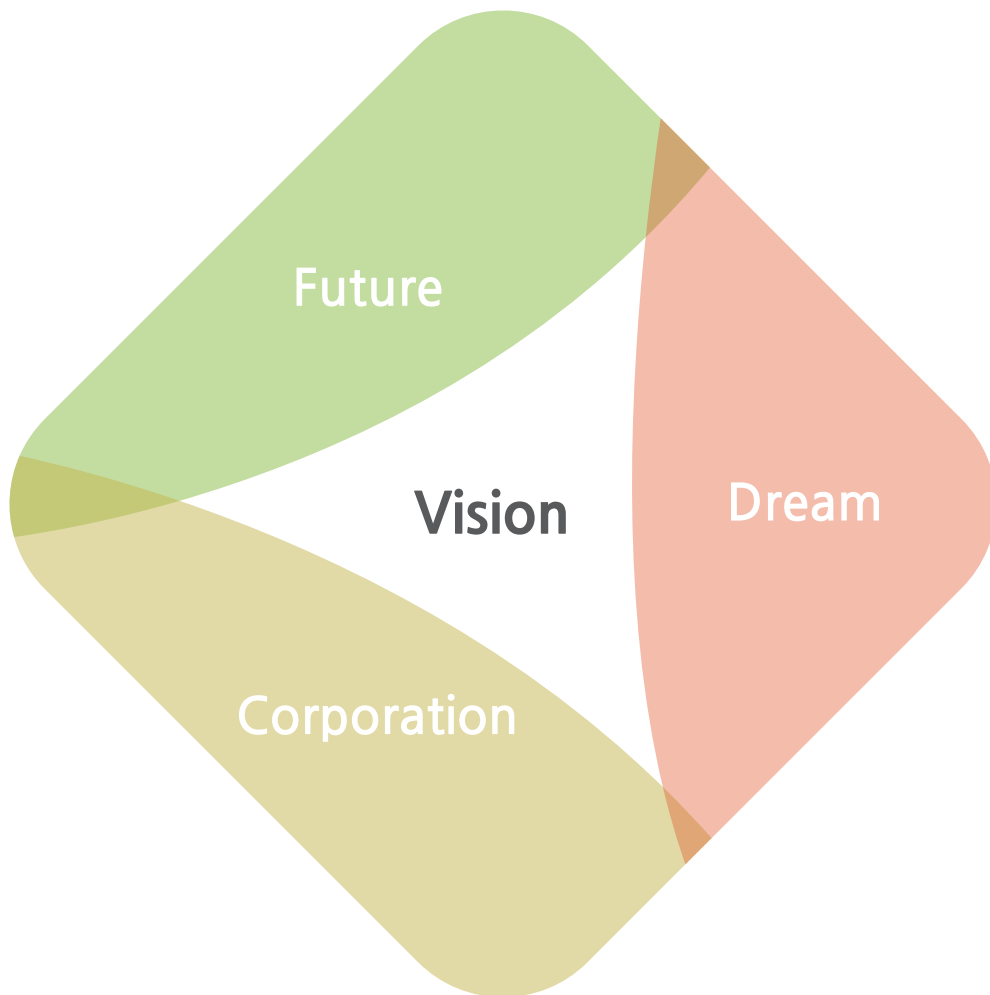
History



- 2020**
 - Color development of BESPOKE refrigerator of Samsung in 2020
 - Color development of BESPOKE microwave of Samsung in 2020
 - Color development of BESPOKE collaboration refrigerator of Samsung
 - Color development of Kimchi refrigerator of Winia Daewoo in 2020
 - Color development of D21 Dimchae Kimchi refrigerator of Winia Daewoo
 - Color development of Y21 refrigerator of Winia Daewoo
 - Color development of Lucell series of Sunil Safes
- 2021**
 - Color development of BESPOKE refrigerator of Samsung in 2021
 - Color development of BESPOKE microwave of Samsung bound for West-south Asia
 - Color development of BESPOKE refrigerator of Samsung bound for North America
 - Ink development for washing machine of LG electronics
 - Color development of Dimchae Kimchi refrigerator of Winia Daewoo in 2021
- 2022**
 - Ink development for drum washing machine of Samsung
 - Color development of BESPOKE refrigerator of Samsung in 2022
 - Color development of refrigerator of Sharp
 - Color development of Y22 refrigerator of Winia Daewoo
 - Color development of Kimchi refrigerator of Winia Daewoo in 2023
- 2023**
 - Color development of microwave of Samsung bound for India
 - Color development of microwave of Samsung bound for Mexico
 - Color development of refrigerator of Sharp Corporation bound for Southeast Asia
- 2024**
 - Color development of BESPOKE refrigerator of Samsung bound for India
 - Development of 8 BESPOKE DP colors of Samsung
 - Color development of refrigerator of Sharp Corporation bound for Egypt
 - Color development of refrigerator of Godrej Group

03 ORGANIZATION





Philosophy

“Justice in Human” “Trust in Business” “Credit in Means”

■ Ink ■

Glass, Acryl, PC, PMMA, METAL For silkscreen printing

Home appliances part: refrigerator, Kimchi refrigerator, air cleaner, microwave, gas oven range

■ Paint ■

Glass, Metal, Wood for Spray roller painting

Furniture, architecture furniture, interior, metal for car, Plating

■ Special painting ■

For synthetic resins, glass

■ Design and color development ■

Product, color, design development for matching customer's demand

■ Silk screen printing ■

Test product produce for color and design development

■ Special resin ■

Acryl, urethane job-order production for each use.

Synthetic painting

DirectApplicationMethod

"World first" developed a type of ink to use silk screen printing and spray by direct application method(DAM) on steel materials like EGI, SUS.

"VULCANUS"

- Special ink apply to various colors, 3D printing method.
- Excellent material property compared to current color steel plate.
(Machinability, weatherability, brightness etc.)

■ Product characteristics

Division	Product	NewChem	Other companies
Silk Screen	Glass ink LT#5000 (2-component) PS#4000 (1-component)	Short drying time - Excellent mass production Various color materialization	Long drying time - Low mass production Limited color materialization
	Acryl ink AP Coat Series (1-component type or 2-component type) PF Coat Series (2-component type) Metal ink(EGI / SUS) VT#4000 (1-component) VT#5000 (2-component)	Mass/small/multiple production possible Printings - Unlimited Expressiveness - Possibly materialize multi cubic design Materializing patent-registered multi printing technique & cubic design	Only mass production Printings - Limited (Work possible within 3 Printings for steel plate) Expressiveness - Limited and simple color sense.
Spray	Glass ink LT#3000 (2-component) Aura#300DP (2-component)	Various color materialization Mass/small/multiple production possible Can use for Special steel, glass	Limited color materialization Mass production only Can use Bottle/Glass only
	Metal ink(EGI / SUS) VT#3000 (2-component)	Strong weather protection (No discoloration when it expose at outdoor) Excellent coating hardness & weather protection (Excellent usability, adhesive property, material property)	Weak weather protection (Impossible outdoor exposure) Weak coating thickness & weather protection

■ Remarks

- 3D irregular reflection printing technique and design patent registration.
- 4D lenticular printing technique & design patent registration.
- Non-gloss printing technique patent registration.
- Possible to color development and mixing color as per customer's requirement.

Business Process

01

| Design
& Planning

Propose trendy pattern designs

02

| Color Development
& Technical Research

Develop color and review technique for mass production

03

| Examination on
Mass Production

Check possibilities of mass production

04

| Manufacturing

Produce & release coating agents, special inks & resins

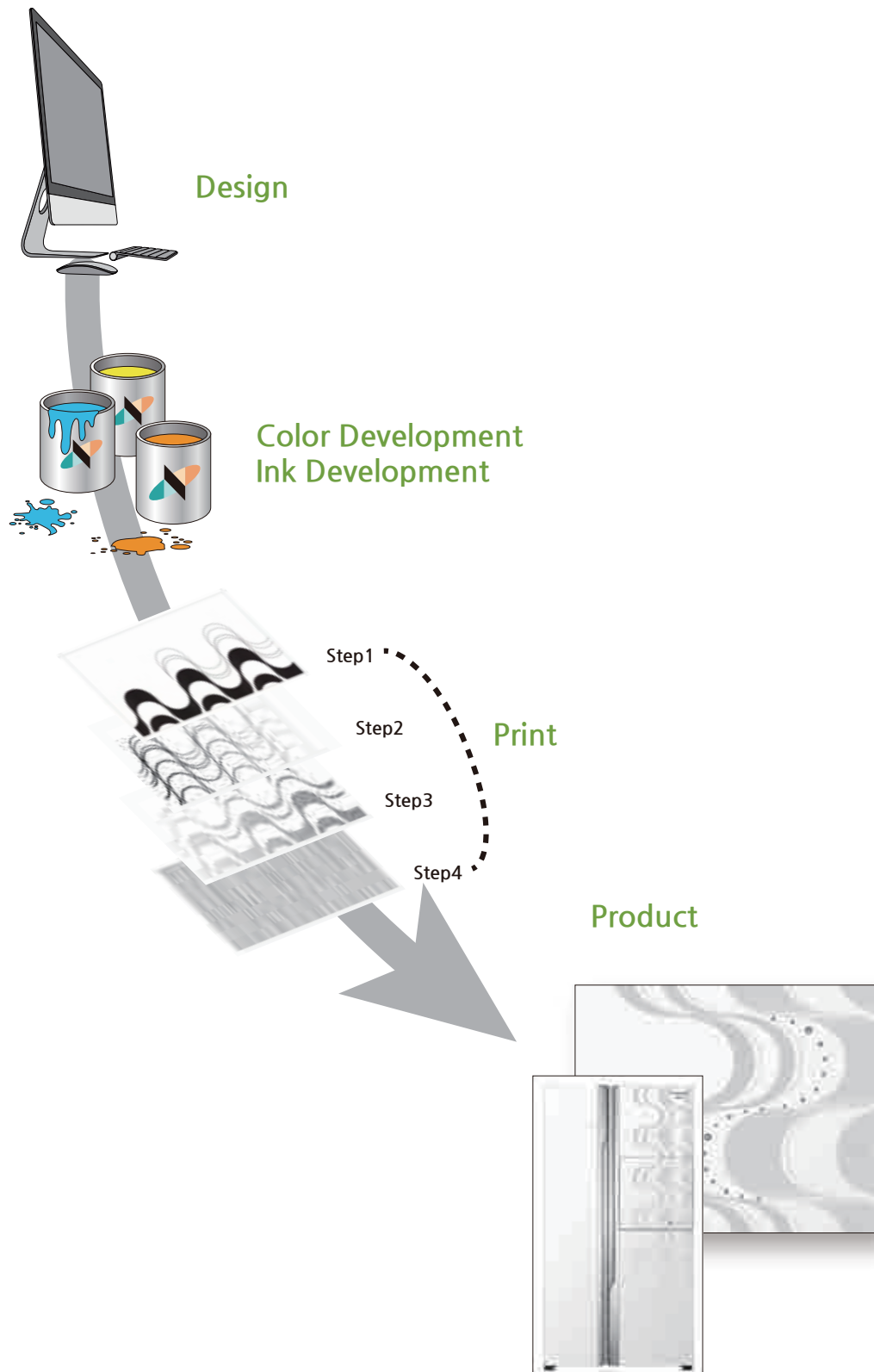
05

| Technical Guide

Technical support for producing products



08 DEVELOPMENT PROCESS



Refrigerator



Queens ring / White



Queens ring / Metal



Mosque / White



Mosque / Brown



Shiny river / White



Shiny river / Metal



Refrigerator



Herringbone White



Carving Silver



Steel Silver



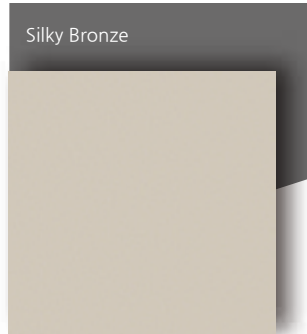
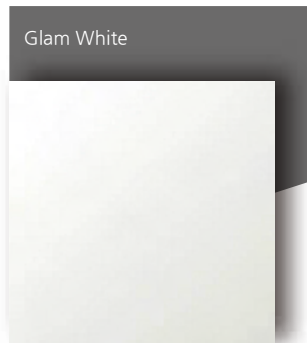
Luxe Metal



Shade Metal



Refrigerator



AirDresser



ShoeDresser



09 APPLICATIONS

Air conditioner



09 APPLICATIONS

Microwave Oven & Oven



09 APPLICATIONS

Microwave Oven & Oven



Elevator



Interior material

MR_GD_101



MR-GN_201



MR_RD_201



MR_RB_301



Interior material

MR_GD_102



MR-GY_401



MR_PE_401



MR_BE_601



"Fresh Concept Tin Case", applied special ink.



1. Various colors

Develop colors that trends and customer wants.

2. Excellent surface hardness

Excellent grades in various reliability tests.
(Adhesion test, Impact test, Heat resistance, etc.)

3. Three-dimensional embossed patterns

Various expressions available.
(Metallic color, Hologram, Pearl effect, etc.)

4. Various effects & Techniques

Various effects & techniques
(3D scattered reflection technique, Glossy & matte effect, Gradation, etc..)

5. Excellent Machinability

It is possible to pressing & forming into various shape

"World First" developed special ink & printing technique, can apply on metal plate directly. (DAM: Direct Application Method)

Process

