Color

Stainless Steel



Automobile

NO.1 COLOR STAINLESS STEEL MANUFACTURER

### dsp Korea

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# Experience A Special Feeling

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## DSP Technology

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**Overall Introduction** Door Belt & Door Frame & Quarter Glass Door Step & Door Scuff & Trunk Guard Speaker Grill / Tail Trim Noise Damping Metal Sheet (OBC Top Cover, Emblem) Certificate



# -04

## **Global Network**

Overseas Domestic

The Exquisite Quality that can only be Visualized through Color Stainless Steel.

By putting the Technology Innovation as its Top Priority to Develop New Products. Through this DSP's Philosophy, we provide Better Products and Beauty.

# DSP is Global Leader in Color Coated Metal Products.

**COOPERATION** 

With DSP's Products, we aim for Qualitative Improvement for both our Clients and Customers, and to do so, we create the Ideal of Products which Customers Needs.

A

**AUTOMOBILE** 

DSP Stainless Steel; its High Quality and Advanced Design

allowed DSP to Enter the Global

Automotive Market

### **INTERIOR WALL, CEILING,** AND FLOORING

DSP Stainless Steel; Design Interior Spaces with Eco-Friendliness and Edgy Style

### **HOME APPLIANCES**

Discover DSP's Stainless Steel, which was compliant with the Global Quality Standards, at your Home

DOOR FRAME, LOUVER, AND MOLDING Meet DSP's Various Color Coated

Products that Express the Beauty of Elegant Color for a long time





We aim for Customers' Satisfaction and Faith with the Best Quality and the Value of DSP.





### **EXTERIOR WALL,** AND ROOFING

DSP Stainless Steel;Cultivate the Energy of the Construction and Make the Exterior More Beautiful



### CANOPY, CEILING, AND COLUMN

Discover the DSP Color Coated Products' Sustainability against the External Climatic Environmental Changes

### **ELEVATOR CABIN, DOOR, AND JAMB**

 $\square$ 

Discover DSP's Color Coated Products that Rejuvenates the Elevator Cabin



We can make your Imagination come to life by Custom Orders

The Company of 30 years History, have been Improving Production Lines for the Enhanced Product Quality, and Continuous Investment on R&D

# DSPis

taking a leap forward as the Global No.1 Color Stainless Steel Manufacturer.

## 1988

#### 1988

 Establishment of DaiJin Metal Successfully developed a stainless etching pipe

## 1992 ~1998

#### 1992

• Built Plant 1 and relocated there. Acquired a patent for etching patterning (No. 055802)

#### 1993

 Acquired Q-Mark / Korea Testing & Research Institute

#### 1996

 Confirmation of Venture Business / Korea Testing & Research Institute

#### 1998

- Developed Titanium Gold Stainless. • Founded DaiJin Metal in China (an
- independent company) Designated as a Promising Export Company / Small and Medium Business Administration

## 2000 $\sim 2005$

### 2000

- Purchased Plant 2
- Developed etching silver stainless (pipe plate)
- Acquired ISO 9002 certification

### 2002

- · Non-welded stainless assembly door and
- frames developed.
- Manufactured and installed cuttingedge high frequency arc ion plating equipment (Plant 1)

#### 2003

- Purchased and expanded the current main plant.
- Acquired ISO 9001-2000 certification

#### 2004

 Company renamed to DaiJin DSP Professional Construction Company Registration (metal structures and joinery

#### 2005

- Hybrid organic/inorganic hybrid NCC
- Developed Nano Ceramic Coating
- Developed stainless pipe

## 2006 ~2010

### 2006

- Acquired a patent for prefabricated front door
- Established DSP Dubai Acquired Innovative Small & Medium Business certificate at INNOBIZ / Small and Medium Business

### 2007

Administration

 Awarded a \$1M Exporter Tower European CE certificate

#### 2008

 Developed tile stainless finish INOXTA • Established DSP Doha (Oatar)

#### 2009

- Acquired a patent for stainless tiles and applied for a patent abroad
- Cutting-edge high vacuum Roll to Roll titanium ion coating equipment
- Produced and installed Unit 1
- · Acquired a patent for the embopattern stainless roll sheet manufacturing method

#### 2010

- Cutting-edge high vacuum Roll to Roll titanium ion coating equipment manufactured and installed Units 2 and 3
- Acquired USA eco-friendly Green
- Guard Children & Schools Certification · Established DSP USA (USA) and DSP Philippines (Philippines)

## 2011 ~2015

### 2011

### Awarded 10 Million Dollar Export Tower

- Registered as a specialized
- (interior construction)

### 2012

- Ltd.
- and China

### 2013

purchased Yongin Plant

### 2014

- wallpaper
- Acquired patent for manufacturing method of colored stainless steel plate
- (Patent No. 10-2014-0018987) Completed Exhibition Center in Saudi Arabia (800 M<sup>2</sup>)

### 2015

(NCC3) Successfully Developed.



- construction business operator
- · Changed company name to DSPI Co.,
- Purchased and moved to the current office of Seoul branch (Pangyo) INOXTA acquired patent in US. Japan
- Selected as a Global Small Giant Established DSP ALL TEC and
- Developed the world's first ultrathin stainless multi sheet and metal

Organic-Inorganic Hybrid Coating

## 2016 ~2021

### 2016

 Eco-Friendly Color Stainless Steel Peel-and-Stick Sheet "VERBLOCK". "VERPANEL" Developed.

### 2017

• NCC (Nano Ceramic Coating) 2 Coat System Developed

### 2018

• Registration of parts and manufacturing method for stainless steel molding (Patent No. 10-1894851)

### 2019

 Selected as a Management Innovation Small and Medium Business (Main-Biz)

### 2020

- NICE Technology Evaluation Excellent Company Certification (T–3 Grade)
- World's First Micro Bead Blast surface treatment technology development
- Cork Laminated Ver-O development
- Selected as Hidden Champion 100 (Material, Components, Equipment)

### 2021

- NICE Technology Evaluation Excellent Company Certification (T-2 Grade)
- Selected as a Promising Design Innovation Company

## Roll to Roll PVD Coating / NCC Coating

### - Roll to Roll Physical Vapor Deposition (PVD)

PVD (Physical Vapor Deposition) is a Technology that uses plasma to generate vapor by colliding a large amount of accelerated ion gas (Usually Using Argon) to a Target Materials. Unlike Conventional Batch-Type PVD, Roll to Roll-Type PVD Technology has outstanding advantages such as Continuous Post-Processing, Quality Uniformity Assurance, and Cost Efficiency.

### Nano Ceramic Coating (NCC)

The organic-inorganic hybrid coating based on silica (nm size) through the sol-gel technique strengthens Durability, Physical Resistance, Chemical resistance and Heat resistance. It provides a polymer that improves the adhesion of the composite due to the complementary effect of the organic-inorganic method.



### **Roll to Roll PVD Coating**

Premium PVD Roll to Roll Coating (Titanium Ion Coating) Process is Mass-Productionable, Economical, and Efficient.

- 01 PVD Coated Product have 10x Surface hardness, compared to Conventional Stainless Steel
- **02** Durability, Chemical Resistance, Corrosion Resistance, and Excellent Maintainability from Stainless Steel's Aspects
- **03** Due to the Roll to Roll Process, there is no color difference up to 600m<sup>2</sup>, which is perfectly suitable for the Large Scale Surface Area with Same Color (Exterior Materials and Industrial Materials such as Automotive / Home Appliance) and Roll to Roll Process is Highly Recommended





### NCC Coating

NCC (Nano Ceramic Coating); Easy Maintenance with Easy Cleaning Features.

- 01 Anti-fungal, Anti-Bacterial, Anti-Contaminant, Anti-Fingerprint, and Scratch-Resistance Features Guaranteed (Test Report Proven)
- **02** No cracks spotted after bending / cutting of NCC coated Material (10mm bending is possible for the Laminated Products)
- 03 Enhanced Contaminant Prevention and Surface protection along with improved maintenance capability with Advanced Color Expression compared to Conventional Stainless steel



## Roll to Roll PVD · NCC **Coating Process**





## "Proven Reliability from the Global Market"

Solid coils are Single-Material Products, which most are sold to overseas markets where entry is strict.



- The Quality of Stainless Steel has been proven, and it can be further improved with PVD and NCC coatings.

## **STS** Laminating Technology

Strong bonding between Different Materials: Lamination Technology enables the cost reduction.



### What is Roll to Roll Lamination Technology?

- Roll to Roll Technology for Laminating two different materials. (i.e. metals)
- With DSP technology, peeling-off does not occur even when laminating, and there is no problem with the laminated product even in a bent area of at least 10mm
- Because it is a PCM (Pre-Coated Material) product, there should be no problem in severe bending, shearing and other fabricating.
- · Noise Damping Features can be obtained additionally through Lamination
- · Relatively easy to process because it is less tough than stainless steel



### Roll to Roll

It is a technology to have Final Products in a Coil format by putting in materials in a Coil Format and can be used for a variety of applications.

### PVD

It is a Technology that increases the durability of the surface by depositing Titanium lons on the surface of stainless steel, and only DSP can implement this technology in a Roll to Roll Format.

### Lamination

Two metals: Stainless Steel (Surface Materials) and EGI or high corrosion-resistant steel (Base Materials), are laminated in a Coil Format.

## NCC

A technology of applying a nano "ceramic" coating to the surface of stainless steel. It is a hybrid of organic and inorganic coating, and it takes advantage of both coatings.

### **DF** Coating

A coating that maximizes weatherability by applying a "Fluoride" Coating to the Stainless Steel surface.

### Surface Treatment

Gloss Unit can be Controlled, and New Pattern can be engraved by bead blasting on stainless steel surface.

\* The only DSP in the world is capable of implement bead blast Treatment in a Roll to Roll Format.

## **BEAD SATIN (BS) Gloss Control Surface Treatment**

This is a process to control the surface glossiness by spraying fine but uniformly sized ceramic beads (small grains) on the surface of stainless steel (BA, No. 4, Mirror, etc.) at a constant pressure. It reduces light reflection while keeping the surface roughness low. The Roll to Roll Gloss Control Surface Treatment Process can provide Quality Uniformity and Cost Efficiency.

### **BS** Process



## Automotive Material





Tail Trim



OBC Top Cover with Sound Damping



Emblem

## MOLDING Door Belt, Door Frame, Quarter Glass

DOOR FRAME

DOOR BELT

Automotive window moldings cover the space between panels and bridge the gaps between the windows and the side panel of the car in automotive design. As a design element that defines the empty space from the window, it is an important element to show the fluid movement of the lines with the adjacent panel.

### Differentiation of DSP Automotive Molding Design

















## I DSP Color Stainless Steel Molding - Continuous Process Line

Pre-coated stainless steel coils are required since the production process of stainless steel door moldings involves continuous roll forming or stamping. Post-Coating is not suitable.



• The coating must be directly coated on the metal to be Forming Processible, and it must be durable as an exterior part.

### **I** Specifications

Color	Glossiness	Surface treatment			
Silver	Semi-Gloss	Bead Satin (BS)			
Silver (Pear White)	Semi-Gloss	Bead Satin (BS) + PVD			
Dark	Semi-Gloss	Bead Satin (BS) + PVD + NCC			
	Gloss	PVD + NCC			
Black Dark	Gloss	PVD + NCC			
Grade	STS 304,	, 430 Grade			
Size	Thikness = $0.4/0.5$ mm				
	111KHess - 0.4 / 0.511111				
	Width = 1000mm Max.				

### About Automotive Material



## Door Step & Door Scuff & Trunk Guard



### I DSP Color Stainless Steel Door Step, Door Scuff

The NCC Coated DSP Materials are highly durable since the coating is stably maintained without the coating being craking or peeling even if the Forming or Press Brake Process is perforemed upon.

## I DSP Color Stainless Steel Trunk Guard

The Trunk Guard is to Protect the Trunk Lead being damaged from loading and carrying of Cargo. The DSP Materials is durable enough to fulfill this task, creating a beautiful surface.





About Automotive Material

## **Speaker Grills**







Speaker Grills (STS + PVD & Nano Coating KIA : K8



## I DSP Color Stainless Speaker

DSP color stainless steel speaker is NCC and PVD color coated material with etched holes. Unlike other paints, the NCC is perfect even in the fine holes of the etched surface, without clogging, and the damaged surface by etching is once again protected with NCC coating to increase durability.



**About Automotive Material** 



## Tail Trim

A hybrid coating with strong resistance to temperature changes provides a glossy black color that was not possible before.



/ Glossy Black



GENESIS G90 / Glossy Black



/ Glossy Black





DSP51 Coaing

### I DSP coating can withstand the harsh environments

- The tail trim coating does not cause any cracks even at Temperature Range of  $-50^{\circ}$  to  $300^{\circ}$ . Temperature Ranges.
- DSP51 is a High Heat Resistant Coating specially developed for Special Purposes.
- Excellent heat resistance and workability makes it an excellent coating for painting complex shapes.
- Glossy black coating DSP51 has a heat resistance as 250~300  $^\circ\!C$  with a 10~20  $\mu\!m$  coating thickness.



### I Specifications

Color / Glossiness





AFTER
DSP51
Gloss
Black



## Emblem



### I Noise Damping Metal (Aluminum OBC Top Cover)

It has excellent noise damping properties and allows to Weight Lightening due to its less weight. They are also durable and have high power density in a wide range of temperatures and environments.





### | Specifications



### I DSP Color Stainless Steel Emblem

The emblem is the symbol of the automobile brand, and it needs to be made with the most luxurious and special material to express the brand's identity.















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PROSPECTIVE DESIGN-DRIVEN COMPANY CERTIFICATE					
 2021 디자인혁신유망기업 선정					
<b>주석회사 디에스의</b> 신업통상자원부는 위 기업물 「2021년 디자인해신유왕기업」으로 선정합니다.					
DSP Co., Ltd. This is to certify that the above company is sel as "Prospective Design-Driven company by" Ministry of Trade, Industry and Energy.	ected The				
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2020-065
Hidden O Materials-Co
Certificate of designation as a
Company Name : DSP Co., Ltd
Valid Date : November 4, 2025
We hereby certity that the above as a Hidden Champion in Materi pursuant to Article 15(2) of th Strengthening of Competitivene Equipment Industry, Article 25(4) the same Act and Article 5(3) is same Act.
November
Min





## **GLOBAL** NETWORK

### **Overseas**



# DSPis

a Global Stainless Steel Construction and Industrial Material Manufacturing Company with a Global Network and its Competitiveness



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