AMA SPRO,
AMERICA & ASIA PRODUCTS INC

HOT-DIP COATED STEEL
PRE-PAINTED STEEL

- Hot-Dip Galvanized Steel
- Hot-Dip 5% Al-Zn Coated Steel
- Hot-Dip 55% Al-Zn Coated Steel
- Electro Galvanized Steel EGI
- Pre-Painted Steel PPGI PPGL PPGF



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America & Asia Products, Inc

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Exportador más grande de Asia para América Latina

OUR VALUE

AMASPRO INC., strives to deliver unparalleled value and
cutting-edge solutions to our clients.

We are guided and motivated by the following

3 *CORE VALUES*

Integrity

We are reliable because we know the market, we are honest, truthful and we will meet our promise to our clients. Our clients' success becomes our success. We provide our clients with the best value products in an effort to grow their reputation within their industry.

Efficiency

We are committed to delivering a total solution of steel products, steel processing, logistics and technical services to fulfill our client's requirements in the most efficient and cost-effective manner.

Profession

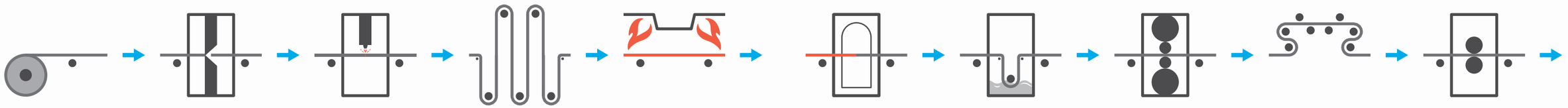
Our specialized team is dedicated to high quality of our services and excellence in our work. AMASPRO INC. prides itself on the professional relationship we develop with all clients.

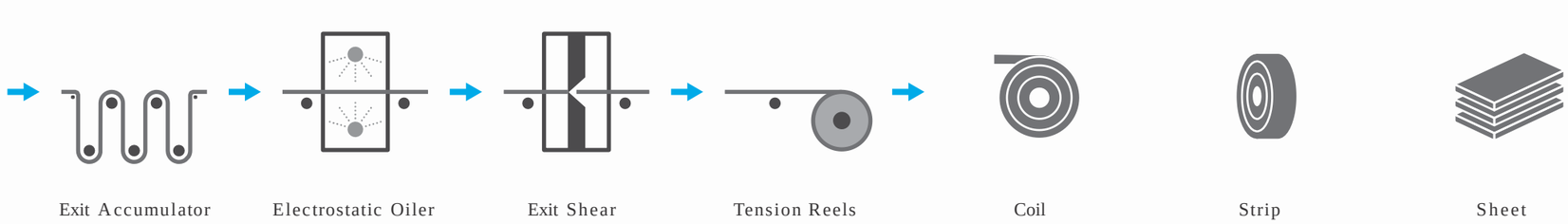
Whenever you need us, we'll be there.

MANUFACTURING PROCESS

HOT-DIP GALVANIZED STEEL GI GL GF

Coating Lines Processes





Characteristic

Excellent Weathering Resistance

The coated layer acts as a sacrificial anode, thus protecting the base steel from corrosion. The chromic acid or anti-fingerprint resin coated treatment adds additional protection to the strip against weathering.

Superb Paintability

The minimized spangle and skinpassed surface is smooth and homogeneous, providing superb paintability. The galvannealing process produces a spongy surface structure which is ideal for paint adhesion.

Good Adhesion

The thickness of the brittle zinc-iron alloy layer at the interface of the steel base metal and the zinc layer is minimized, thereby improving the adhesion of the zinc coating. The strip can be used for lock forming applications.

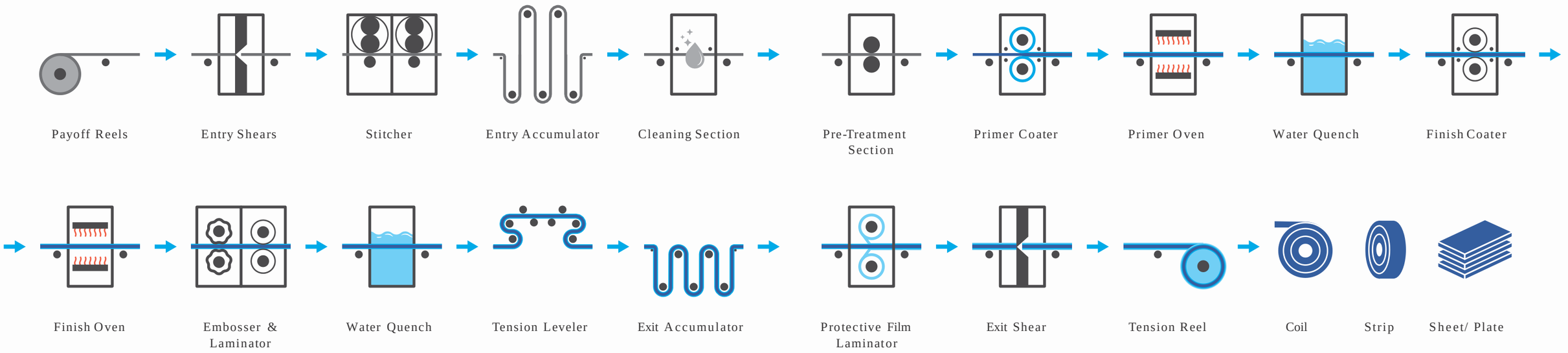
Availability

The line can produce coated steels with thicknesses ranging from 0.15 to 4.5mm and widths ranging from 450 to 1550mm. Available surface finishes include regular spangle and minimized (zero) spangle.

MANUFACTURING PROCESS

PRE-PAINTED STEEL PPGI PPGL PPGF

Pre-Painted Coating Lines Process



Characteristic

Broad Availability

Color steel sheets are available in a wide range of colors, sizes and mechanical characteristics. The broad selection of color, finish, texture, gloss, and hardness, expands the creativity of designers for building exteriors, interior decorations, household appliances, and so on. Color steel sheets can be film-embossed or metal-embossed, giving the finish a fine texture.

Outstanding Formability

The substrate of color steel sheets, a hot-dip metallic coated cold-rolled steel sheet, is heat treated in a continuous annealing furnace. It is available in drawing, extra deep drawing, and lock forming grades. The tightly controlled hot-dip process minimizes the formation of the brittle zinc-iron alloy layer, thus ensuring a firmly adhering zinc layer which does not peel during forming. The color coatings are durable and flexible. Thus, they do not peel during forming.

Excellent Cost Effectiveness

Color steel sheets are easy to use and have no need for post-painting, thus eliminating the need to invest in expensive labor, painting equipment, and pollution abatement costs. The extra durability of color steel sheets against corrosion and weathering imparts a lasting application life and noticeably reduces maintenance costs. In the long term, these features produce significant savings for end users.

Superb Durability

Color steel sheets use specially selected hot-dip metallic coated steel as a substrate. The metallic coating retards oxidation of the base steel metal. The paints utilized in color steel sheets are specially selected in accordance with the processing methods and the end use. The 2 coat 2 bake method of paint application provides color steel sheets with extra resistance against abrasion, impact, chemical corrosion, and weathering.

HOT-DIP GALVANIZED STEEL GI GL GF

Definition of Surface Finish and Coating Types

Texture	Product Characteristics	Production Method	Characteristics
	Regular Spangle	Spangle produced by crystallization solidification.	Good adhesion and weathering resistance.
	Minimized (Zero) Spangle	Control the composition of pot to achieve minimized spangle.	Uniform surface and attractive finish after painting.
	Extra Smooth Surface	Temper rolling produces an extra smooth surface.	Uniform surface and attractive finish after painting.
	Hot-Dip 5% Al-Zn Coated Steel	The coating alloy comprises about 5% aluminum, mischmetals and balanced Zn.	Good formability, excellent paintability and superior corrosion resistance.

Texture	Product Characteristics	Production Method	Characteristics
	Hot-Dip 55% Al-Zn Coated Steel	The coating alloy comprises about 55% Al, 1.5% Si and balanced Zn.	Uniform and pleasing appearance, and good adhesion.
	Electro Galvanized Steel	The process involves electroplating, running a current of electricity through a saline/zinc solution with a zinc anode and steel conductor.	• Uniform distribution of extremely thin zinc coating • Spangle free • Welds easily • Good paintability
	Galvannealed	The galvanized steel is heated to alloy the zinc-iron layer.	• No spangle and rough surface. • Good paintability and weldability.

HOT-DIP GALVANIZED STEEL GI



Hot-Dip Galvanized Steel		CNS 1244 2013		JIS G 3302 2019		ASTM A653M 2017	AS1397 2011	EN 10346 2015
Specifications		Hot-Rolled Base : SGHC SGHD SGH 340 400 440 490 540	Cold-Rolled Base: SGCC SGCD1~3 SGC 340 400 440 490 570	Hot-Rolled Base: SGHC SGHD SGH 340 400 440 490 540	Cold-Rolled Base: SGCC SGCD1~3 SGC 340 400 440 490 570	DS DDS CS TYPE A, B, C FS TYPE A, B SS GRADE 33(230) 37(255) 40(275) 50(340) CLASS 1~3 80(550) CLASS 1~3	G1~G3 G250 300 350 400 450 550	DX51-52-53D S220GD (250 280 320 350 550)
Base Steel Thickness (mm)		1.2~4.60	SGCD1~3: 0.27~2.0mm SGCC/SGC: 0.19~2.0mm	1.2~4.60	SGCD1~3: 0.27~2.0mm SGCC/SGC: 0.19~2.0mm	DS/DDS: 0.27~2.0mm CS/FS: 0.19~4.50mm SS GRADE 33~80: 0.19~4.50mm	G1: 0.19~4.50mm G2&G3: 0.27~2.0mm G250~550GD: 0.19~4.6mm	DX51D: 0.19~4.50mm DX52~53D: 0.27~2.0mm S220~550GD: 0.19~4.6mm
Coating Mass	Regular Spangle (Note: thickness above 0.60mm)	Z08 Z18 Z30 Z55 Z09 Z20 Z35 Z60 Z10 Z22 Z37 Z12 Z25 Z45 Z14 Z27 Z50		Z08 Z20 Z37 Z10 Z22 Z45 Z12 Z25 Z60 Z14 Z27 Z18 Z35		Z90 Z350 Z120 Z450 Z180 Z500 Z275 Z550 Z305 Z600	Z100 Z600 Z200 Z275 Z350 Z450	Z100 Z140 Z450 Z350 Z200 Z600 Z275
	Minimized Zero Spangle							
Surface Finish		Regular Spangle, Minimized (Zero) Spangle, Extra-Smooth						
Surface Treatment		Chromating, Oiled, Resin Coated (Anti-Fingerprint), or Green Treatment (Environmentally Friendly Anti-Fingerprint)						

Remarks

1. Tolerance for thickness, width, flatness and so on conforms to individual product specification.
2. All products with thickness 2.0mm and under can be skinpassed.
3. The specification for thicknesses under 1.6mm for hot-rolled base metal according to JIS G3302 will be the same as for thicknesses 1.6mm.
4. Please make inquires to our sales division for products with special specifications. Coating mass beyond the specifications above can be provided by YIEH upon mutual agreement between customers and us.
5. Coil inside diameters can be either 508mm or 610mm. Maximum coil outside diameter is 2000mm.
6. Coating mass Z08, Z09 and Z90 only apply for cold-rolled base metal.

HOT-DIP GALVANIZED STEEL GL



Hot-Dip 55%Al-Zn Coated Steel

		CNS 15237 2013			JIS G 3321 2017			ASTM A792M 2010			AS 1397 2011			EN10346 2015			
Specifications		SGLCD SGLCDD	SGLCC	SGLC340 SGLC400 SGLC440 SGLC490 SGLC540 SGLC570	SGLCD SGLCDD	SGLCC	SGLC400 SGLC440 SGLC570	CS Type A B C FS	DS	SS Grade 230 255 275 340 550	G3	G1 G2	G250 G300 G350 G450 G500 G550	DX51D	DX52D DX53D	S220GD S250GD S280GD S320GD S350GD	S550GD
Base Steel Thickness (mm)		0.3 ≀ 1.5	0.16 ≀ 2.0	0.20 ≀ 2.0	0.3 ≀ 1.5	0.16 ≀ 2.0	0.20 ≀ 2.0	0.16 ≀ 2.0	0.30 ≀ 1.5	0.20 ≀ 2.0	0.3 ≀ 1.5	0.16 ≀ 2.0	0.20 ≀ 2.0	0.16 ≀ 2.0	0.3 ≀ 1.5	0.20 ≀ 2.0	0.20 ≀ 2.0
Coating Mass	Regular Spangle	AZ70 AZ90 AZ100 AZ120 AZ150 AZ170 AZ185			AZ70 AZ90 AZ120 AZ150 AZ170 AZ185			AZM100 AZM110 AZM120 AZM150 AZM165 AZM180			AZ150			AZ100 AZ150 AZ185			
Surface Finish		Regular Spangle															
Surface Treatment		Chromating, Oiled, Resin Coated (Anti-Fingerprint), or Green Treatment (Environmentally Friendly Anti-Fingerprint)															

Remarks

1. Tolerance for thickness, width, flatness and so on conforms to individual product specification.
2. All products with thickness 2.0mm and under can be skinpassed.
3. Coil inside diameters can be either 508mm or 610mm. Maximum coil outside diameter is 2000mm.
4. Please make inquires to our sales division for products with special specifications. Coating mass beyond the specifications above can be provided by YIEH upon mutual agreement between customers and us.

HOT-DIP GALVANIZED STEEL GF



Hot-Dip 5%Al-Zn Coated Steel

		CNS 15236 2013			JIS G 3317 2017			ASTM A875M 2013					AS 1397 2011			EN10346 2015			
Specifications		SZACD1	SZACC	SZAC340 SZAC400 SZAC440 SZAC490 SZAC540 SZAC570	SZAHC SZAH 340 400 440 490	SZACC SZAC 340 400 440 570	SZACD1	Commercial Steel Type A B C	Forming Steel Type A B	DDS	Structural Steel Grade 230 255 275 340	Structural Steel Grade 550	G3	G1 G2	G250 G300 G350 G450 G500 G550	DX51D	DX52D DX53D	S220GD S250GD S280GD S320GD S350GD	S550GD
Base Steel Thickness (mm)		0.27 ≀ 1.10	0.2 ≀ 1.8	0.2 ≀ 1.75	1.30 ≀ 4.50	0.2 ≀ 1.80	0.27 ≀ 1.10	0.20 ≀ 4.50	0.20 ≀ 4.50	0.27 ≀ 1.10	0.20 ≀ 4.50	0.20 ≀ 2.00	0.27 ≀ 1.10	0.2 ≀ 1.8	0.2 ≀ 4.50	0.20 ≀ 4.50	0.27 ≀ 1.10	0.20 ≀ 4.50	0.20 ≀ 1.80
Coating Mass	Regular Spangle	Y08 Y22 Y10 Y25 Y12 Y27 Y14 Y30 Y18 Y35 Y20			Y08 Y22 Y10 Y25 Y12 Y27 Y14 Y35 Y18 Y20			ZGF90 ZGF135 ZGF180 ZGF225 ZGF275 ZGF350					ZA90 ZA135 ZA180 ZA225 ZA275 ZA350			ZA095 ZA130 ZA185 ZA200 ZA255 ZA300			
	Minimized Zero Spangle																		
Surface Finish		Regular Spangle, Minimized Spangle																	
Surface Treatment		Chromating, Oiled, Resin Coated (Anti-Fingerprint), or Green Treatment (Environmentally Friendly Anti-Fingerprint)																	

Remarks

1. Tolerance for thickness, width, flatness and so on conforms to individual product specification.
2. All products with thickness 2.0mm and under can be skinpassed.
3. Coil inside diameters can be either 508mm or 610mm. Maximum coil outside diameter is 2000mm.
4. Please make inquires to our sales division for products with special specifications. Coating mass beyond the specifications above can be provided by YIEH upon mutual agreement between customers and us.

ELECTRO GALVANIZED STEEL EGI

SPECIFICATIONS	JIS G3313 SECC	JIS G3313 SECD	JIS G3313 SECE
Quality	Commercial Quality	Drawing Quality	Deep Drawing Quality
Usage	• Furniture Computer • Case Electronic • Parts Electrical • Equipment	Automobile	Automobile
Type of Surface Treatment	• Chromate Treatment • Phosphate Treatment • Oiling		
Available Size	Thickness: 0.3~1.6mm Width: 850~1580mm Coating Weight: 10-30g/m (single side) Max. Coil Weight: ≦ 20 MT		
Remarks	The table above shows the widest range of product dimensions. For a detailed acceptable order range, please contact Sales & Marketing Division.		

Characteristics of Electro-Galvanized Steel

Corrosion Resistance

Electro-galvanized steel has good corrosion resistance, especially as the surface of the coating is evenly bonded, corrosive gases or liquids are not easy to permeate the interior. The zinc is solidified to produce the outer layer of the pure zinc coating, a thin film is formed on the surface to prevent it from being corroded during exposure to acid and alkaline environments, which protected the steel body for a long time.

Paintability

Electro-galvanized steel has various colors be coated after the chemical process, which can be customized to customer requirements. Electro-galvanized steel is beautiful and decorative. Its flat and uniform surface provides good conditions for painting and improves its paint adhesion and anticorrosion properties after painting.

Weldability

Electro-galvanized steel has good ductility and will the surface not fall easily during various processing, bending and handling.

PRE-PAINTED STEEL

PPGI PPGL PPGF

STRUCTURE

Color steel sheets is made up of

Layers Of Metal + Surface Treatment + Coatings

Each layer plays an important role in producing the excellent quality of color steel sheets.

BASE METAL

- Hot-Dip Galvanized Steel
- Al-Zn Coated Steel
- Cold Rolled Steel
- Electro-Galvanized Steel
- Al-Coated Steel
- Stainless Steel
- Aluminum Strip

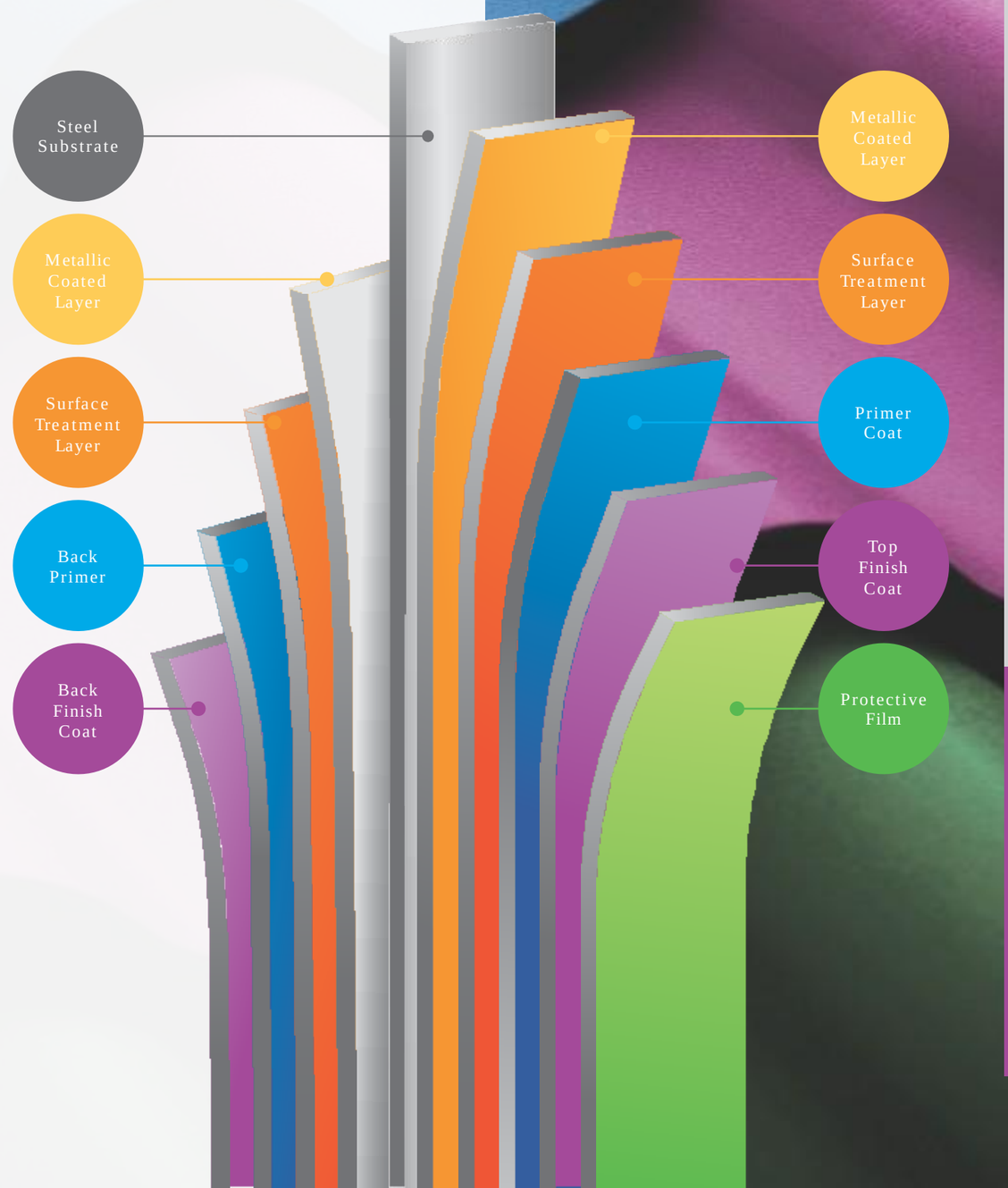
COATING FILM

It can be embossed to versatile texture

- Polyester (PE)
- Silicone Modified Polyester (SMP)
- Fluorocarbon (PVDF)
- Acrylic (AC)
- Polyurethane (PU)
- PVC Plastisol
- PVF2 Paints

In addition, A High-Built Paint Film | Special Function Coating

e.g. white board/ green board color sheet, Rough Matt/ Neo Matt polyester color sheet, anti-electrostatic color sheet, high performance clean color sheet and anti-microbial color sheet, can also be produced.



PRE-PAINTED STEEL PPGI PPGL PPGF

SPECIFICATIONS

	Pre-Painted Hot-Dip Galvanized Steel	Pre-Painted 5% Al-Zn Coated Steel			Pre-Painted 55% Al-Zn Coated Steel	Pre-Painted Embossed Steel
Coating Type	PE, SMP, Acrylic, PVDF					PVC Plastisol
Product Spec.	CNS 10804 (2013) CNS 15298 (2013) CNS 15299 (2013)	JIS G3312 (2013) CGCC CGCD1~3 CGC340 CGC400 CGC440 CGC490 CGC570	JIS G3318 (2013) CZACC CZACH CZACD1 CZAC340 CZAC400 CZAC440 CZAC490 CZAC570	JIS G3322 (2013) CGLCC CGLCD CGLC400 CGLC440 CGLC490 CGLC570	ASTM A755M (2016) AS 2728 (2013) EN 10169+A1 (2010)	JIS K6744 (2007) SG SA ASTM A755M (2016) EN 10169+A1 (2010)
Coating Thickness		Primer: PU or Epoxy 5μm Topcoat: 15~20μm Back Primer: PU or Epoxy 2μm Back Coat: PE or Epoxy 5~12μm				Primer: Epoxy Topcoat: PVC, PLASTISOL 150~250μm Back Primer: PU or Epoxy 2μm Back Coat: PVC, PLASTISOL 100~250μm or Epoxy 7μm
Surface Treatment		• Protective film can be applied • Metal Embossed • Cedar Wood • Stucco • Leather				• PVC Embossed • Leather • Lichee

Remarks

1. The ASTM standards presented here adopt the equivalent metric system. (The imperial system deletes the "M" after their specification number, such as A755 and A792.)
2. Coating thickness is for reference only.

PRE-PAINTED STEEL PPGI PPGL PPGF

Standard Color Coating


RAL 1015
Light Ivory

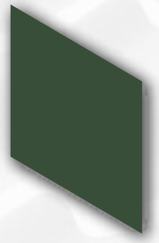

RAL 1019
Grey Beige


RAL 3009
Oxide Red


RAL 5008
Grey Blue


RAL 6005
Moss Green


RAL 6011
Reseda Green


RAL 6020
Chrome Green


RAL 7006
Beige Grey


RAL 7016
Anthracite Grey


RAL 7022
Umbra Grey


RAL 7032
Pebble Grey


RAL 7037
Dusty Grey


RAL 8004
Copper Brown


RAL 8012
Red Brown


RAL 8017
Chocolate Brown


RAL 9002
Grey White

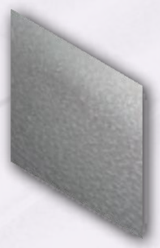

RAL 9006
White Aluminum


RAL 9005
Jet Black

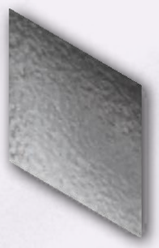

RAL 9007
Grey Aluminum


RAL 9022
Pearl Light Grey

Customized Coating Pattern


Leather
Grain


Fir
Grain


Cement
Wall Grain


Pine
Grain


Cypress
Grain


Yew
Grain


Marble
Grain


Grey Stone
Brick Grain


Ottery Stone
Brick Grain


HL

1 The color presented here differs slightly from the actual color due to print limitations.
Remark: Please refer to our sample panels for a more precise representation of the colors.

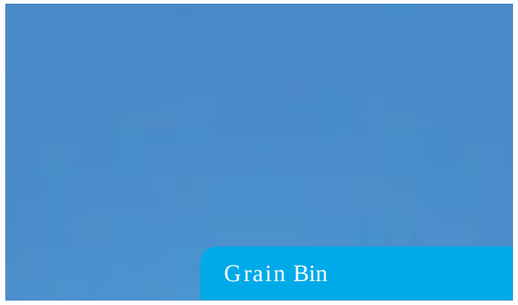
2 Other colors are available subject to inquiry.

APPLICATION

Hot-Dip Galvanized Steel GI GL GF


Steel Beam


C Shape Steel


Grain Bin


Guardrail


Ducting


Solar Panel Bracket


Flooring Decking Sheet


Corrugated Metal Fence Partition

Pre-Painted Steel PPGI PPGL PPGF

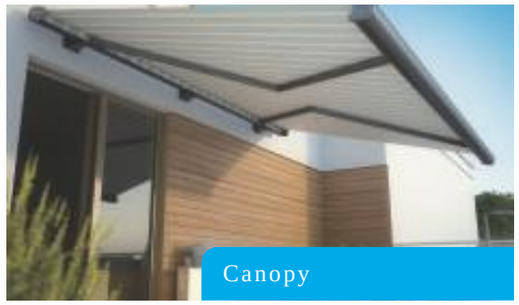

Garages

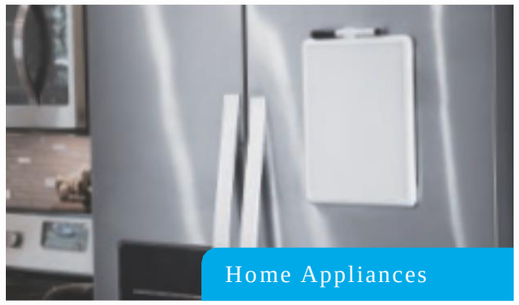

Roofing


Iron Rolling Door


Building


Fence


Canopy


Home Appliances

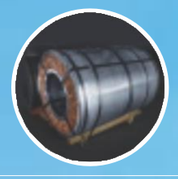

Cabinet

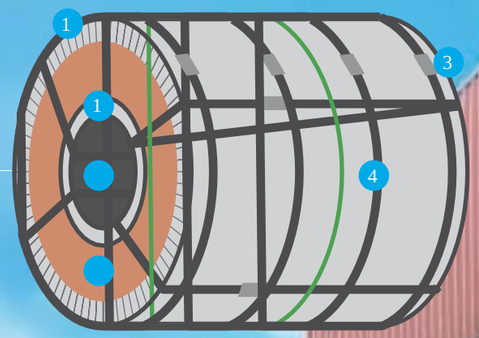
PACKAGING & LABELING

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PACKA

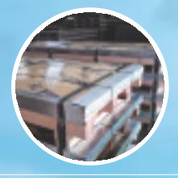
Coil Strip

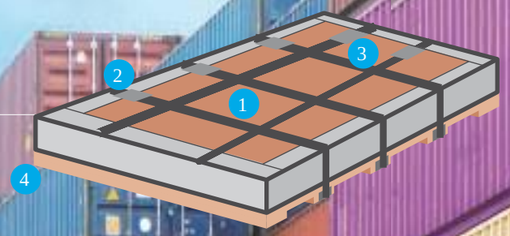




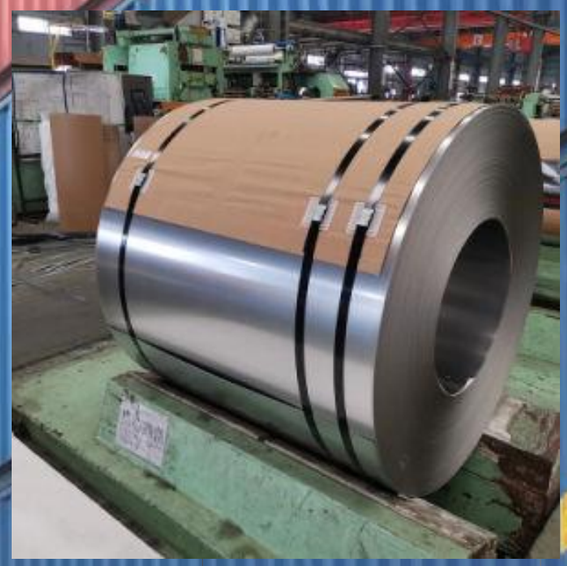
1. Metal protective ring
2. Waterproof wrapping paper
3. Buckle
4. Metal band

Sheet Plate





1 Waterproof wrapping paper
2 Buckle Metal band
3 Wooden pallet





AMASPRO values details of packaging with mill's standard or customer's request to avoid unexpected damage during delivery. Similarly, each product has its shipping mark on external packing for identification and inspection more conveniently.

AMA SPRO,
AMERICA & ASIA PRODUCTS INC

- Immediate processing of your requests
- Fast Dispatch
- Constant quality control of our products

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