

HOT ROLLED STEEL >>>

The Billets as raw materials, through furnace heating, high-pressure water to reduce the phosphorus, then entering the roughing mill, cutting head, end, and then put into the finishing mill, cutting the edge, after the times of straightening, leveling and other finishing line treatment, and then cutting board or coil becomes the hot rolled steel sheet and hot rolled steel coil.



AVAILABLE SPECIFICATION

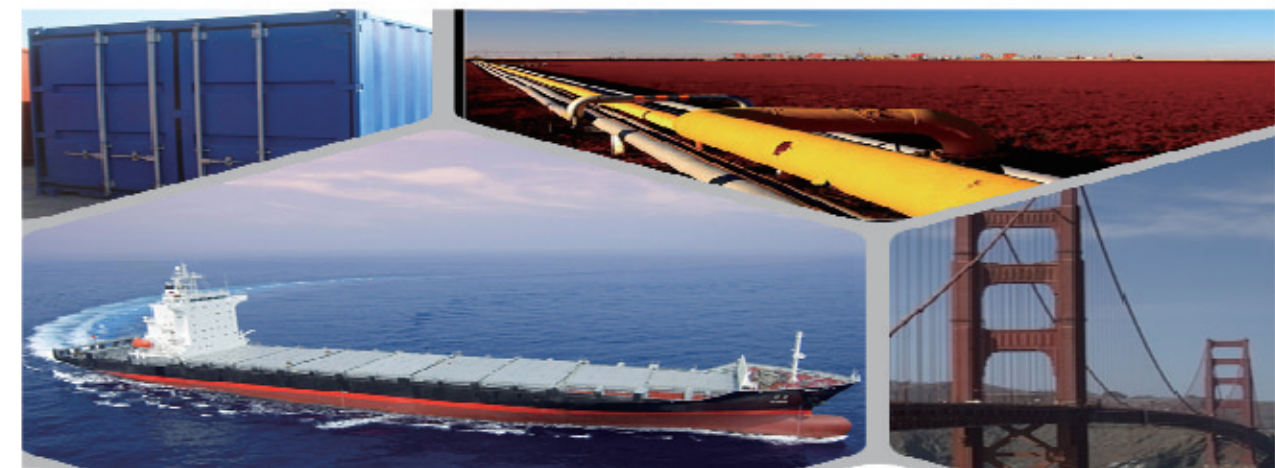
| | THICKNESS | WIDTH | LENGTH | COIL INSIDE DIAMETER |
|----------------------------|-------------|------------|--------------|----------------------|
| HOT ROLLED STEEL COIL | 1.50~25.0mm | 600~2000mm | | 762mm |
| HOT ROLLED STEEL STRIP | 1.50~20.0mm | 30~720mm | | 762mm |
| HOT ROLLED STEEL PLATE | 6.00~700mm | 500~4500mm | 4000~18000mm | |
| HOT ROLLED STEEL SHEET | 1.20~25.0mm | 50~2000mm | 0~18000mm | |
| HOT ROLLED STEEL CHEQUERED | 1.40~10.0mm | 900~1500mm | 0~18000mm | |

STANDARD & GRADE

| HOT ROLLED STEEL COILS | | | | |
|--|---|--|------------|--------------------|
| | JIS | ASTM | SAE | EN |
| COMMERCIAL QUALITY | G3131 SPHC | A569 A635 A659 A1011 CS Type A, B, C | 1006~1025 | 10111 DD11 |
| DRAWING QUALITY | G3131 SPHD | | 1006~1010 | 10111 DD12 |
| DEEP DRAWING QUALITY | G3131 SPHE | A622 A1011 DS Type A, B | 1006~1010 | 10111 DD13 DD14 |
| GENERAL STRUCTURE (T.S.<490N/MM ²) | G3101 SS330 SS400 G3106 SM400A G3132 SPHT1 SPHT2 SPHT3 | A36 A283 GR.C A570 GR.30~40 A1001 SS GR.30~40 | 1010~1025 | |
| GENERAL STRUCTURE (T.S.≥490N/MM ²) | G3101 SS490 G3106 SM490A SM490YA | A570 GR.45~50 A607 GR.45~70 A1011 SS GR.45,50 | J1392 050X | |

APPLICATION

Our Hot-Rolled Steel Sheets and Coils are applied to a wide range of uses such as automobile, electrical appliance, machinery manufacturing, container manufacturing, shipbuilding, bridge, pipeline, and receive high acclaim from our customers for its excellent quality.



COLD ROLLED STEEL >>>

The raw material of cold rolled steel coil/sheet is high quality hot rolled product, and after pickling, continuous rolling, degreasing, annealing, skin pass, slitting and cut to length line etc. Along with it many kinds of new technology and new process of global cold rolling production have been applied. Therefore the quality of the goods could be guaranteed.



AVAILABLE SPECIFICATION

| COLD ROLLED STEEL | |
|---------------------|--------------------------------------|
| THICKNESS | 0.1 mm-4.00mm |
| WIDTH | 30mm-2000mm |
| SHEETS LENGTH | +0mm-6000mm |
| COIL INNER DIAMETER | 508mm or 610mm |
| SURFACE TREATMENT | Matt Finish/Bright Finish, Oiled/Dry |
| ANNEALING METHODS | Bright Anneal/Black Anneal |
| COIL WEIGHT | 1mt-25mt |

APPLICATION

The finished product has a variety of excellent capabilities, such as processing capability and smooth, flat surface. It's widely used in outdoor and interior decoration, furnishing manufacturing, home appliance, automobile etc.

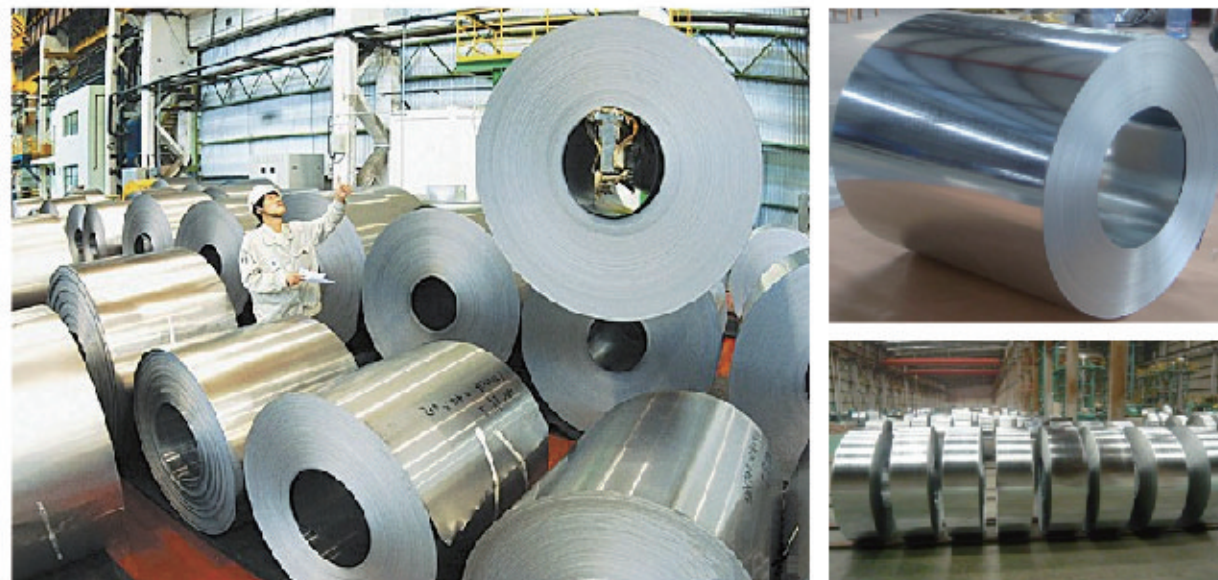
STANDARD & GRADE

| | COLD ROLLED STEEL COILS | | |
|----------------------------|--------------------------|--------------|----------------|
| | JIS G3141-2005 | EN10130-2006 | ASTM A1008-12a |
| COMMERCIAL QUALITY | SPCC | DC01 | CS Types A/B/C |
| DRAWING QUALITY | SPCD | DC03 | DS Types A/B |
| DEEP DRAWING QUALITY | SPCE SPCF (non aging) | DC04 | DDS |
| EXTRA DEEP DRAWING QUALITY | SPCG (non aging) | DC05/06 | EDDS |



HOT-DIP GALVANIZED STEEL COIL/SHEETS >>>

Hot-dip galvanized steel coils are available with a pure zinc coating through the hot-dip galvanizing process. It offers the economy, strength and formability of steel combined with the corrosion resistance of zinc. The hot-dip process is the process by which steel gets coated in layers of zinc to protect against rust. It is especially useful for countless outdoor and industrial applications.



AVAILABLE SPECIFICATION

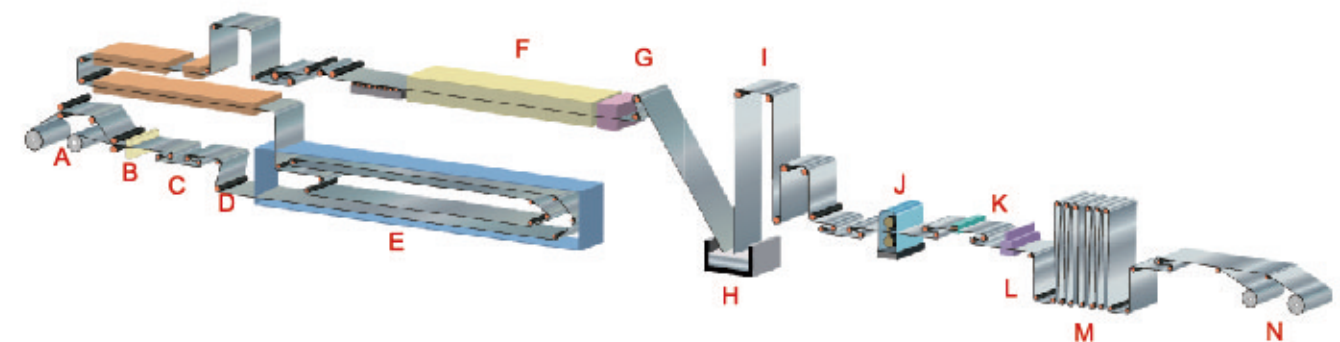
| HOT-DIP GALVANIZED STEEL COILS | |
|--------------------------------|---|
| THICKNESS | 0.12mm-5.0mm |
| WIDTH | 750-1850mm Max |
| COATING MASS | 20g/m ² -400g/m ² |
| SPANGLE | Regular Spangle, Minimized Spangle, Zero Spangle |
| SURFACE TREATMENT | Chromated/non-chromated, Oiled/non-oiled, Anti Finger Print |
| COIL INNER DIAMETER | 508mm or 610mm |

STANDARD & GRADE

| HOT-DIP GALVANIZED STEEL COILS | | | | |
|--------------------------------|----------------|-------------------------|-----------------|--------------------|
| | ASTM A653M-06a | EN10327:2004/10326:2004 | JIS G 3302-2010 | AS - NZS 4534-2006 |
| COMMERCIAL QUALITY | CS | DX51D+Z | SGCC | G1+Z |
| STRUCTURE STEEL | SS GRADE 230 | S220GD+Z | SGC340 | G250+Z |
| | SS GRADE 255 | S250GD+Z | SGC400 | G330+Z |
| | SS GRADE 275 | S280GD+Z | SGC440 | G350+Z |
| | SS GRADE 340 | S320GD+Z | SGC490 | G450+Z |
| | SS GRADE 550 | S350GD+Z | SGC570 | G500+Z |
| | | S550GD+Z | | G550+Z |

*Hard quality galvanized steel (HRB75-HRB90) available on customer's request.

PRODUCTION FLOW



- A Dual Uncoiler
- B Stitcher(Welder)
- C Bridle
- D Steering Unit
- E Entry Accumulator
- F Heating & Soaking Furnace
- G Jet Cooling Section
- H Ceramic Zinc Pot
- I Cooling Tower
- J Skin Pass Mill
- K Tension Leveller
- L Chromating With Dryer
- M Exit Accumulator
- N Dual Recoiler

HOT-DIP ALUZINC STEEL COIL/SHEETS >>>

Hot-dip aluzinc steel sheet is substrated on cold rolled steel (CRC) in various strength and specification. Coating composition is 55% aluminum in weight ratio, 43.4% zinc, and 1.5% silicon, with excellent corrosion and heat resistance performance.



AVAILABLE SPECIFICATION

| HOT-DIP ALUZINC STEEL COILS | |
|-----------------------------|--|
| THICKNESS | 0.13MM-2.0MMM |
| WIDTH | 750-1850mm Max |
| COATING MASS | 20g/m ² -200g/m ² |
| SPANGLE | Regular Spangle, Minimized Spangle |
| SURFACE TREATMENT | Chromated/non-chromated , Oiled/non-oiled, Anti Finger Print |
| COIL INNER DIAMETER | 508mm or 610mm |

STANDARD & GRADE

| HOT-DIP ALUZINC STEEL COILS | | | | |
|-----------------------------|----------------|--------------|------------------|----------------|
| | ASTM A792M-06a | EN10327-2004 | JIS G 3321: 2010 | AS - 1397-2001 |
| COMMERCIAL QUALITY | CS | DX51D+AZ | SGLCC | G1+AZ |
| STRUCTURE STEEL | SS GRADE 230 | S220GD+AZ | SGLC400 | G250+AZ |
| | SS GRADE 255 | S250GD+AZ | SGLC440 | G300+AZ |
| | SS GRADE 275 | S280GD+AZ | SGLC490 | G350+AZ |
| | SS GRADE 340 | S320GD+AZ | SGLC570 | G450+AZ |
| | SS GRADE 550 | S350GD+AZ | | G500+AZ |
| | | S550GD+AZ | | G550+AZ |

*Hard quality galvanized steel (HRB75-HRB90) available on customer's request.

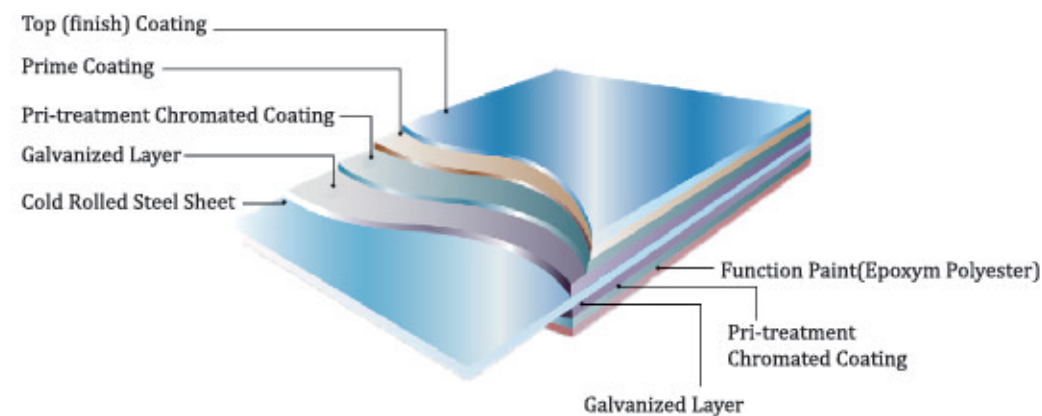
APPLICATION

Production of cold formed corrugated sheets and profiles for roofing, cladding, decking, tiles, sandwich walls, rainwater protective systems, air conditioning duct as well as electrical appliances and engineering.



PRE-PAINTED GALVANIZED/ ALUZINC STEEL COIL >>>

With GI (aluzinc) as base metal, after pretreatment (degrease and chemical treatment) and liquid dope with several layers of color, then after firing and cooling, finally the plate steel is called pre-painted galvanized (aluzinc) steel. Pre-painted galvanized steel is good capable of decoration, molding, corrosion resistance. It generally displays superior workability, durability and weather resistance.



STANDARD & GRADE

| PRE-PAINTED GALVANIZED STEEL COIL | | | |
|-----------------------------------|---------------|---------------|-----------------|
| | ASTM A755M-03 | EN10169: 2006 | JIS G 3312:2012 |
| COMMERCIAL QUALITY | CS | DX51D+Z | CGCC |
| STRUCTURE STEEL | SS GRADE 230 | S220GD+Z | CGC340 |
| | SS GRADE 255 | S250GD+Z | CGC440 |
| | SS GRADE 275 | S280GD+Z | CGC490 |
| | SS GRADE 340 | S320GD+Z | CGC570 |
| | SS GRADE 550 | S350GD+Z | |
| | | S550GD+Z | |

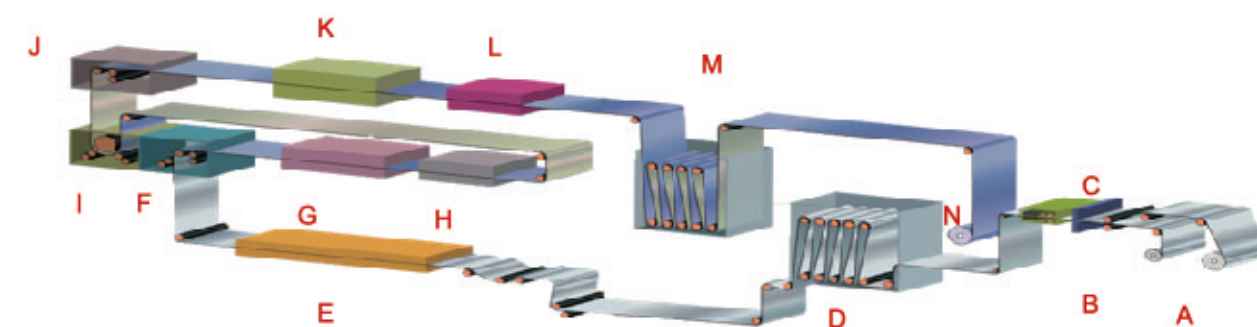
| PRE-PAINTED ALUZINC STEEL COIL | | | |
|--------------------------------|---------------|---------------|-----------------|
| | ASTM A755M-03 | EN10169: 2006 | JIS G 3322:2012 |
| COMMERCIAL QUALITY | CS | DX51D+Z | CGLCC |
| STRUCTURE STEEL | SS GRADE 230 | S220GD+Z | CGLC340 |
| | SS GRADE 255 | S250GD+Z | CGLC440 |
| | SS GRADE 275 | S280GD+Z | CGLC490 |
| | SS GRADE 340 | S320GD+Z | CGLC570 |
| | SS GRADE 550 | S350GD+Z | |
| | | S550GD+Z | |

AVAILABLE SPECIFICATION

| | PRE-PAINTED GALVANIZED STEEL COIL | PRE-PAINTED ALUZINC STEEL COILS |
|---------------------|---|--|
| THICKNESS | 0.15mm- 1.5mm(BMT) | 0.15mm- 1.5mm (BMT) |
| WIDTH | 900mm- 1340 mm | 900mm- 1340 mm |
| COATING MASS | 30g/m ² - 275g/m ² | 30g/m ² - 185g/m ² |
| PAINT | Standard Polyester(PE),SMP,HDP,PVDF | Polyester(PE),SMP,HDP,PVDF |
| COLOR | RAL Scale* | RAL Scale* |
| COIL INNER DIAMETER | 508mm or 610mm | 508mm or 610mm |
| COIL WEIGHT | 3mt - 7mt | 3mt - 7mt |
| BASE MATERIAL | Hot-dip Galvanized Steel Cold/Hot Rolled Steel | Hot-dip Aluzinc Steel Cold/Hot Rolled Steel |

Special color available on customer request

COLOR COATING LINE



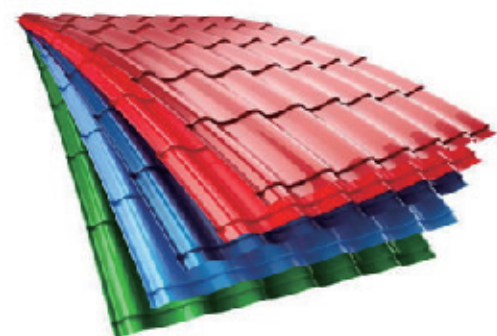
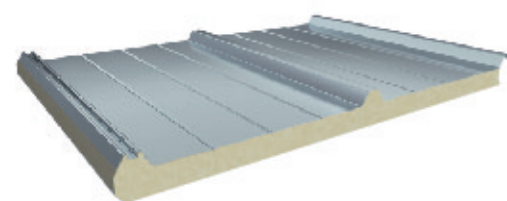
- A Dual Uncoiler
- F Prime Coater
- K Finish Oven
- B Stitcher
- G Prime Oven
- L Finish Water Quench
- C Bridles
- H Prime Water Quench
- M Exit Accumulator
- D Entry Accumulator
- I Finish Coating
- N Recoiler
- E Degreasing & Chemical Section
- J Finish Back Coater

PAINT PROPERTY

| Category | 180° T Bend | Impact (J) | Salt Resistant (h) | MEK Scrub Resistance (times) | Pencil Hardness | 60° Specular Glossiness of Coating | Chromatism (ΔE) |
|----------|-------------|------------|--------------------|------------------------------|-----------------|------------------------------------|-----------------|
| PE | ≤3T | ≥9 | ≥500 | ≥100 | ≥F | 10-85 | ≤0.8 |
| SMP | ≤3T | ≥9 | ≥500 | ≥100 | ≥F | 10-85 | ≤0.8 |
| HDP | ≤2T | ≥9 | ≥1000 | ≥100 | ≥HB | 10-85 | ≤0.8 |
| PVDF | ≤2T | ≥9 | ≥1000 | ≥100 | ≥HB | 10-85 | ≤0.8 |

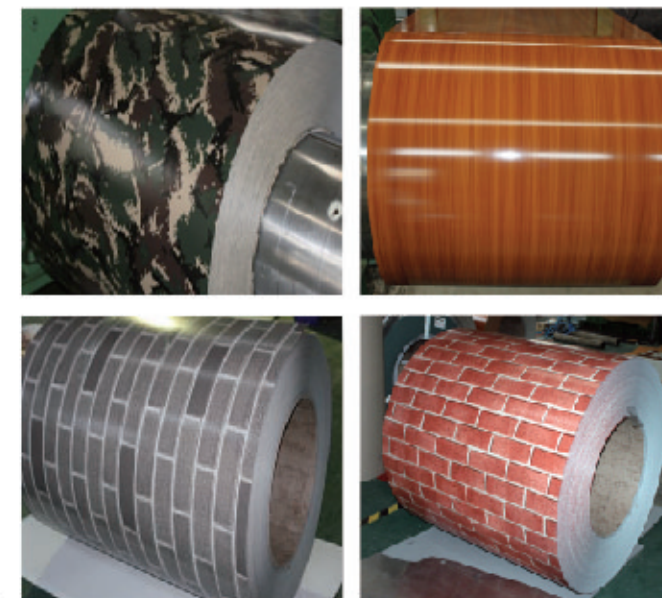
APPLICATION

| | |
|---------|---|
| OUTDOOR | roof, roof structure, surface sheet of balcony, frame of window, door, door of garage, roller shutter door, booth, persian blinds, cabana, etc. |
| INDOOR | door, isolater, frame of door, light steel structure of house, home electronic appliances, etc. |



PRINTING STEEL >>>

CNBM Printing steel plate is the product based on the metal sheet, of which surface is finally installed of the plastic film (PVC, PE) in addition to being firstly covered with the coating and printed ink in. The coated layer of printing steel plate consists of chemical and filming layer, primer coated layer, pattern printed layer and surface coated layer. The top and back coating shall generally be the application of the weatherproof paint, as well can be the application of the paint with special capabilities such as stain-resistant, self cleaning capability, high thermal resistance, antistatic capability, sterilizing capability, finger-print prevention and etc.



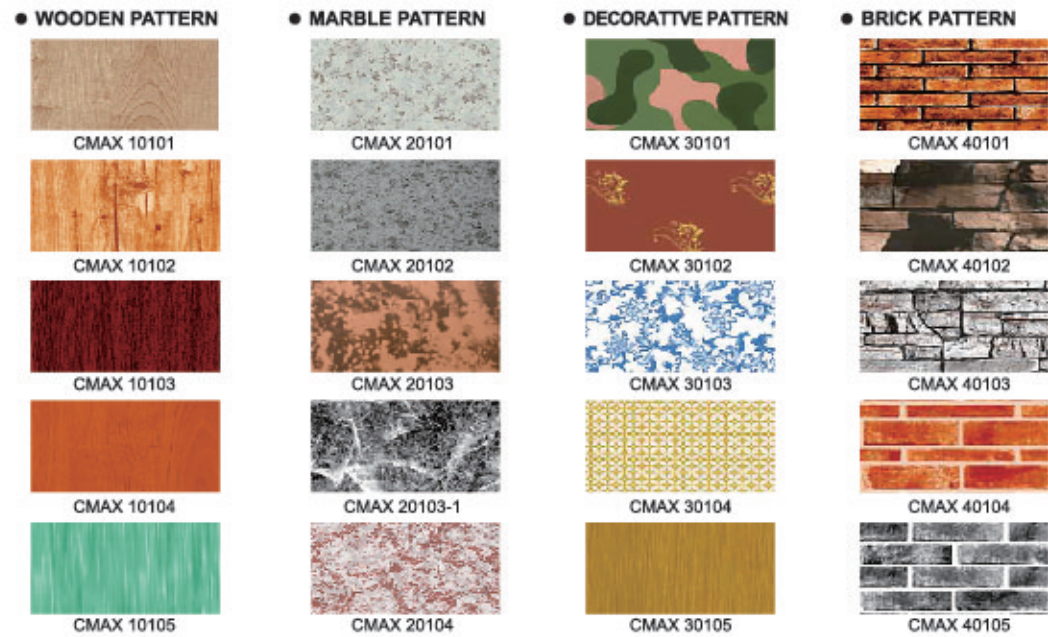
AVAILABLE SPECIFICATION

| PRINTING STEEL | |
|----------------|--|
| BASE MATERIAL | HDGI, ALUZINC, CR |
| GRADE | SGCC, DX51D, ASTMA653, EN10142, S350GD |
| THICKNESS | 0.20-0.80mm |
| WIDTH | 600-1250 mm |
| ZINC COATING | 60-200g/m ² |
| PAINT | PE, PVDF, SMP, HDP |
| COILID | 508 mm |
| COIL WEIGHT | 3-6 mt |

MAIN TEST STANDARD

| PRINTING STEEL | |
|-------------------|---|
| TBENDING | 0-3T |
| PENCIL HARDNESS | ≥ 2H |
| IMPACT | ≥ 9J |
| MEK (TIME) | ≥ 100 |
| SALT SPRAY | ≥ 720HR |
| ACID STABILITY | Dip in 5% HCl liquor for 300hr, no bubble, no color change and no peel-off |
| ALKALI RESISTANCE | Dip in 5% NaOH liquor for 300hr, no bubble, no color change and no peel-off |

PRINT PPGI COLOR CART



APPLICATION

| | |
|-----------------------------|--|
| CONSTRUCTION | Internal and external wall, roofing, partition, ceiling, booth, air duct, etc. |
| FURNITURE | Wardrobe, table, chair, locker, shelves, cabinets, etc. |
| DOOR | Shutter door, security door, garage door, door frame, window frame and so on. |
| TRANSPORTATION | Car decoration board, train partition and decoration board, shipping compartment, and the decorative panel. |
| HOUSEHOLD APPLIANCES | Refrigerator, freezer, washing machine, air conditioner, electric fan, lamp, solar water heater, electric water heater, etc. |



PACKING >>>

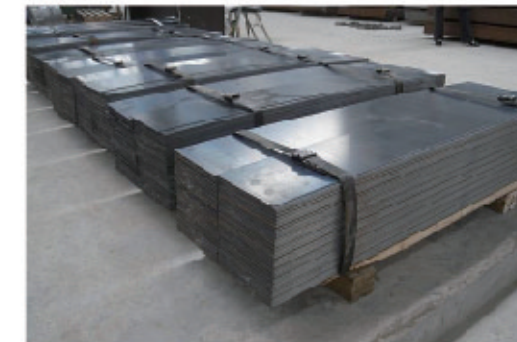
The packing of coils consists of anti-damp paper, PVC film, hardboard paper, steel box, strapped with steel strips, fitted with locks and edge protectors and guarantees the optimal condition of the delivered goods. Each coil can be additionally fitted with wooden/steel skids(eye to the side) or wooden pallets(eye to the sky).



EYE TO THE SIDE



EYE TO THE SKY



STANDARD CHEMICAL COMPONENT >>>

| JIS STANDARD | | | | | | | |
|--------------|-----------|------------|-----------|-----------|---|---|-----------|
| SORT | C(% ,MAX) | Mn(% ,MAX) | P(% ,MAX) | S(% ,MAX) | YS(N ² /mm ²)MIN | TS(N ² /mm ²)MIN | EL(%) MIN |
| SGCC | 0.15 | 0.80 | 0.05 | 0.05 | 205 | 270 | - |
| SGC340 | 0.25 | 1.70 | 0.20 | 0.05 | 245 | 340 | 20 |
| SGC400 | 0.25 | 1.70 | 0.20 | 0.05 | 295 | 400 | 18 |
| SGC440 | 0.25 | 2.00 | 0.20 | 0.05 | 335 | 440 | 18 |
| SGC490 | 0.30 | 2.00 | 0.20 | 0.05 | 365 | 490 | 16 |
| SGCH | 0.18 | 1.20 | 0.08 | 0.05 | - | - | - |

| ASTM STANDARD | | | | | | | |
|----------------|-----------|------------|-----------|-----------|---|---|-----------|
| SORT | C(% ,MAX) | Mn(% ,MAX) | P(% ,MAX) | S(% ,MAX) | YS(N ² /mm ²)MIN | TS(N ² /mm ²)MIN | EL(%) MIN |
| CSTYPEA | 0.10 | 0.60 | 0.03 | 0.035 | 170/380 | — | 20 |
| CSTYPEB | 0.02-0.15 | 0.60 | 0.03 | 0.035 | 205/380 | — | 20 |
| CSTYPEC | 0.08 | 0.60 | 0.10 | 0.035 | 170/410 | — | 15 |
| SSGRADE33(230) | 0.20 | 1.35 | 0.04 | 0.04 | 230 | 310 | 20 |
| SSGRADE37(255) | 0.20 | 1.35 | 0.10 | 0.04 | 255 | 360 | 18 |
| SSGRADE40(275) | 0.25 | 1.35 | 0.10 | 0.04 | 275 | 380 | 16 |
| SSGRADE50(340) | 0.25 | 1.35 | 0.20 | 0.04 | 340 | 450 | 12 |
| SSGRADE55(380) | 0.25 | 1.35 | 0.04 | 0.04 | 380 | 480 | 11 |
| SSGRADE80(550) | 0.20 | 1.35 | 0.04 | 0.04 | 550 | 570 | — |

| EN STANDARD | | | | | | | |
|-------------|-----------|------------|-----------|-----------|---|---|-----------|
| SORT | C(% ,MAX) | Mn(% ,MAX) | P(% ,MAX) | S(% ,MAX) | YS(N ² /mm ²)MIN | TS(N ² /mm ²)MIN | EL(%) MIN |
| DX51D | 0.12 | 0.60 | 0.10 | 0.045 | — | 270-500 | 22 |
| S220GD | 0.20 | 1.70 | 0.10 | 0.045 | 220 | 300 | 20 |
| S250GD | 0.20 | 1.70 | 0.10 | 0.045 | 250 | 330 | 19 |
| S280GD | 0.20 | 1.70 | 0.10 | 0.045 | 280 | 360 | 18 |
| S320GD | 0.20 | 1.70 | 0.10 | 0.045 | 320 | 390 | 17 |
| S350GD | 0.20 | 1.70 | 0.10 | 0.045 | 350 | 420 | 16 |
| S550GD | 0.20 | 1.70 | 0.10 | 0.045 | 550 | 560 | — |

| AS STANDARD | | | | | | | |
|-------------|-----------|------------|-----------|-----------|---|---|-----------|
| SORT | C(% ,MAX) | Mn(% ,MAX) | P(% ,MAX) | S(% ,MAX) | YS(N ² /mm ²)MIN | TS(N ² /mm ²)MIN | EL(%) MIN |
| G1 | 0.12 | 0.50 | 0.03 | 0.035 | — | — | — |
| G250 | 0.12 | 0.50 | 0.03 | 0.035 | 250 | 320 | 25 |
| G300 | 0.30 | 1.60 | 0.10 | 0.035 | 300 | 340 | 20 |
| G350 | 0.30 | 1.60 | 0.10 | 0.035 | 350 | 420 | 15 |
| G450 | 0.20 | 1.20 | 0.04 | 0.03 | 450 | 480 | 10 |
| G500 | 0.20 | 1.20 | 0.04 | 0.03 | 500 | 520 | 8 |
| G550 | 0.20 | 1.20 | 0.04 | 0.03 | 550 | 550 | 2 |

CONVERSION TABLE >>>

| Theoretical Conversion Table Of Steel Weight | | | | | |
|--|----------------|------------|-------------|----------------|--------------|
| No. | THICKNESS (MM) | WIDTH (MM) | LENGTH (MM) | QUANTITY (PCS) | WEIGHT (TON) |
| 1 | 1.00 | 1000 | 3000 | 1 | 0.0236 |
| 2 | 2.00 | 1219 | 5000 | 1 | 0.0957 |
| 3 | 3.00 | 1250 | 6000 | 1 | 0.1766 |
| 4 | 4.00 | 1500 | 8000 | 1 | 0.3768 |

| Theoretical Conversion Table Of Coating | | |
|---|-----------------------|----------------|
| No. | TWO-SIDED COATING (g) | THICKNESS (um) |
| 1 | 60 | 7.89 |
| 2 | 80 | 10.53 |
| 3 | 100 | 13.16 |
| 4 | 120 | 15.79 |
| 5 | 180 | 23.68 |
| 6 | 220 | 28.95 |
| 7 | 275 | 36.18 |
| 8 | 350 | 46.05 |
| 9 | 450 | 59.21 |
| 10 | 500 | 65.79 |
| 11 | 600 | 78.95 |