



汉武钢铁
HANWU STEEL

Steel Coil

- Stainless Steel Coil
- Galvalume Coil
- Galvanized Coil
- Carbon Steel Coil
- PPGI&PPGL Coil



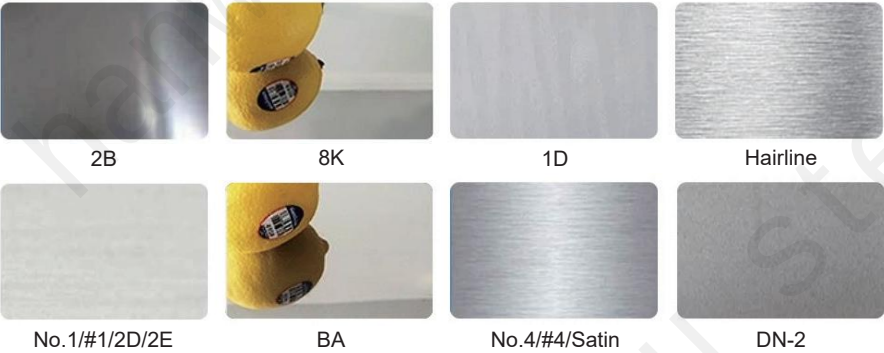
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COMMON MATERIALS

Austenitic Stainless Steel	201/202/301/302/303/304/304L/305/309S/310S/316/316L/316Ti/317/317L/321/330/347 etc.
Ferritic Stainless Steel	405/409/430/434/444 etc.
Martensitic Stainless Steel	403/410/416/420/440A etc.
Duplex Stainless Steel	329/2205/2304/2507/2750 etc.
Standard	ISO 15510:2010, ASTM A240/A240M, JIS G4304/G4305, EN 10088-2, etc.
Certificate	SGS, BV, TUV, V-Trust, etc.



STAINLESS STEEL SURFACE



STAINLESS STEEL PRODUCTION & TESTING



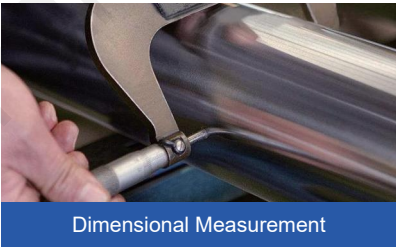
Production Line



Production Line



Chemical Composition



Dimensional Measurement



UT Testing



Yield Test

PROPERTIES OF STAINLESS STEEL

Yield Strength

Depending on the grade, stainless may exhibit high strength and low elongation or low strength and high elongation properties. They compare very well to carbon steels when it comes to yield strength.

Strength at High Temperatures

Stainless steel performs comparatively better than other carbon steels at higher temperatures. It shows better fire resistance due to its high strength retention factor at elevated temperatures (above 500°C). It also has better stiffness retention factor than carbon steel above 300°C.

Tensile Strength

When it comes to tensile strength, stainless steel is superior to materials like aluminium, brass, and mild steel. The highest tensile strength is seen in precipitation hardening and martensitic grades. These grades can have tensile strengths that are twice as much as the ubiquitous 304 and 316 grades. Duplex steel, in particular, has a high strength/ductility ratio.

Cryogenic Resistance

Some stainless steel grades are extremely adept at handling a wider range of temperatures. Austenitic steels display exceptional toughness and increased tensile strength at sub-zero temperatures. This widens the scope of their usage considerably opening up new avenues for modern applications.

Ductility

The ductility of different stainless steel grades can be significantly different. Some grades have high ductility allowing the use of strenuous deep drawing processes.

Stainless Steel Coil



Stainless Steel Coil



Cold Rolled Stainless Steel Coil



Hot Rolled Stainless Steel Coil



Stainless Steel Strip

Thickness	2.5mm-10.0mm or Customized
Coil ID	508mm / 610 mm
Length	As required (Common: 2000mm/2440mm/3000mm 5800mm/6000mm etc.)
Standard	AISI, ASTM, GB, BS, EN, JIS, DIN etc.
Surface	2B, 2D, BA(bright annealed), No.1, No.4 4K, 6K, 8K, HL(Hair Line), etc.
Certificate	ISO / SGS / BV etc.

TYPE OF CARBON STEEL

Type	Carbon Content	Characteristic	Grade
Low Carbon Steel	0.05-0.25%	They are good ductile and manipulable, have good weldability, and do not respond to the heat treatment of quenching.	AISI 1005-1026, 1108-1119, 1211-1215, 1513-1527, etc.
Medium Carbon Steel	0.26-0.60%	They accept hardening treatment, and are more resistant and harder naturally, but they are also more difficult to weld.	AISI 1029-1053, 1137-1151, 1541-1552, etc.
High Carbon Steel	0.61-1.50%	They are harder and more resistant than medium-carbon steels, and have a good disposition to hardening.	AISI 1055-1095, 1137-1151, 1561-1572, etc.

DIFFERENT CARBON STEEL

Type	Standard	Characteristic
Carbon Steel	A36/S235JR/A283/A514/A572/S355JR/A709 A285/A387/A515/A516/A533/A537/A588 etc.	Carbon steel can be easily machined and welded, making it versatile for various applications.
Manganese Steel	Werkstoff X120Mn12, Euronorm X120Mn13 Din 1.3401, ASTM A128, Z120M12, etc.	Manganese Steel with a 11% to 14% manganese content is a work hardening steel.
Pressure Vessel Steel	A202/A204/A285/A387/A515/A516/A533/A537 etc.	Used for the construction of vessels, characterised are high toughness and good cold forming characteristics.
Structural Steel	ASTM A36/ASTM A500/ASTM A572/ASTM A588 ASTM A709/ASTM A992/ASTM A285/ASTM A514	Structural steel is metal used in construction materials, it is defined as steel optimized for use in building construction.
Wearing(NM) Series	NM260, NM300, NM400, NM450, NM500, NM550, NM600, etc.	NM Series is a high-strength wear resistant steel plate with high hardness.

CARBON STEEL PRODUCTION & TESTING



Production Line



Production Line



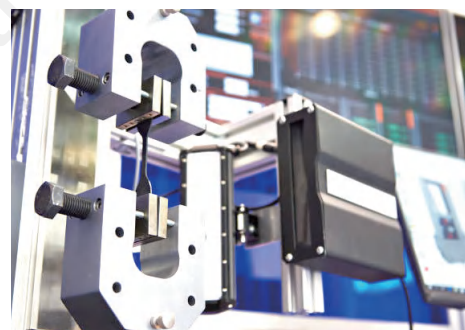
Dimensional Measurement



UT Testing



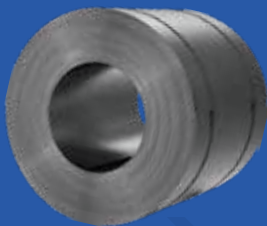
Chemical Composition



Yield Test



Carbon Steel Strip



Hot Rolled Steel Coil



Cold Rolled Steel Coil

Thickness	Hot Rolling: 2.75mm-100mm Cold Rolling: 0.2mm-3mm
Width	45mm-2200mm
Length	Support Customization
Standard	AISI, ASTM, GB, BS, EN, JIS, DIN etc.
Delivery Conditions	Rolling, Annealing, Quenching, Tempering Or Standard
Production Process	Hot Rolled / Cold Rolled

The use of coils generally has more advantage than the use of steel sheets, as means of improving yield ratio and automating line production. Coil is the material from which sheet is cut, and possesses characteristics which differs from those of a sheet. Thus effective use of coil improves productivity.

GALVANIZED & GALVALUME

Aspects	Galvanized Steel	Galvalume Steel
Composition	Galvanizing is made entirely of zinc. Its protective capacity is less enhanced than that of Galvalume.	The composition of a Galvalume coat utilizing these three ingredients is 55% aluminum, 43.4% zinc, and 1.6% silicon.
Usage	Galvanized steel is also used in outdoor applications but it is often used for different purposes than galvalume steel. It is used for fencing, guardrails, and railings.	Galvalume is commonly used in outdoor applications like siding, gutters, flashings around chimneys, skylights, and other roof penetrations.
Thickness	There is no theoretical limit to thickness, just a practical limit. It must not be greater than 10 miles, or else the cool-down may take longer.	Galvalume has a thickness of approximately 1 mil. Its production comprises the hot-dip technique, and the thickness variation is mostly determined by the coating.
Appearance	Whereas galvanized steel has a matte gray finish making fences and guardrails look appealing.	Galvalume steel has a slightly shiny silvery appearance giving a modern look to refrigerator cases used in restaurants and bakeries.

GALVANIZED STEEL SURFACE

Big Spangle (Large)	Normal Spangle (Regular)	Minimized Spangle (Small)	Spangle - Free (Zero)
			

STANDARD AND GRADE

Hot-Dip Galvanized Steel				
Standard	ASTM A653M-06a	EN10327:2004/10326:2004	JIS G 3302-2010	AS-NZS 4534-2006
Commercial Quality	CS	DX51D+Z	SGCC	G1+Z
Structural 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

PRODUCTION & TESTING



Production Line



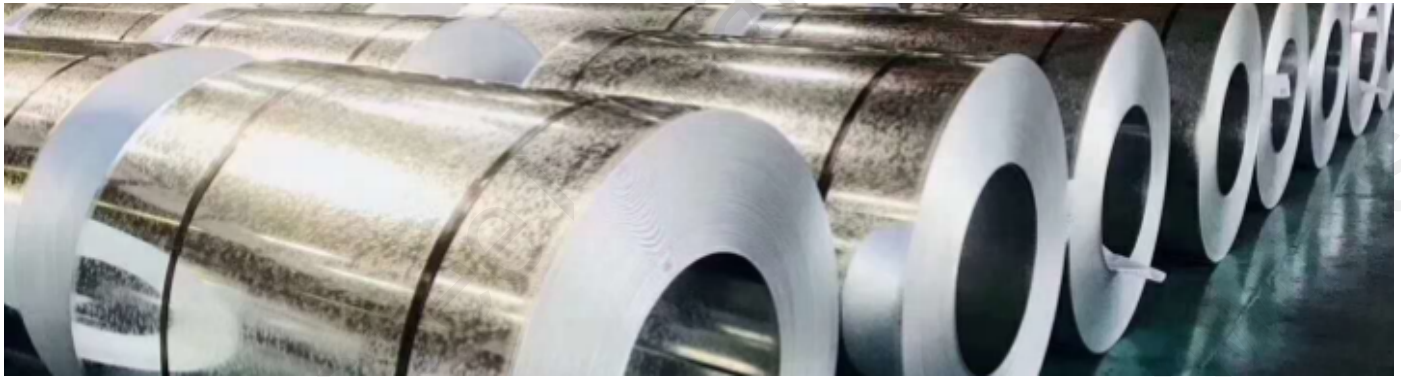
Production Line



Dimensional Measurement



Flaw Detection



Thickness	0.12mm-3.5mm or Customized As Required
Coil ID	508mm / 610 mm
Width	600mm-1500mm or Customized As Required
Zinc Coating	20-275 g/m ²
Alu-Zinc Coating	30-275 g/m ²
Galvalume	Aluminum (Al) 55% / Zinc (Zn) 43.5% / Silicon (Si) 1.5%
Surface	Bared / Checkered / Coated / Painted
Processing	Bending/Welding/Punching/Cutting/Threading Grooved/Shouldered



Coil



Checker Coil



Coated Coil



Galvanized Strip

DIFFERENT BETWEEN PPGI & PPGL

- **PPGI: Pre-painted galvanized steel**

PPGI uses galvanized sheets (with a layer of zinc coating) as base metal.

- **PPGL: Pre-painted galvalume steel**

PPGL is with galvalume sheet as substrate, which is coated with 55% aluminum, 43.3% zinc, and 1.6% silicon.

CATEGORY AND FILM THICKNESS OF PRIMERS

- **Epoxy Primer**

The epoxy primer has a strong adhesion to the base metal and good properties in water-proof, alkali-proof and chemical resistance.

- **Polyester Primer**

The epoxy primer has a strong adhesion to the base metal and good properties in water-proof.

- **Water-soluble Acrylic Acid Primer**

The primer of this kind has strong adhesion, excellent flexibility, lower organic solvent and low-temperature curing.

- **Polyurethane Primer**

The primer of this kind has excellent chemical resistance, durability and flexibility.

CATEGORY AND FILM THICKNESS OF PRIMERS

- **Polyester (PET)**

The finish coat of this kind has strong adhesive force, a variety of colors.

- **Silicon Modified Polyesters (SMP)**

The membrane of the finish coat of this kind has excellent rigidity, abrasion resistance.

- **High-Durability Polyester (HDP)**

The finish coat of this kind has excellent retention of color.

- **Polyvinylidene Fluoride (PVDF)**

The finish coat of this kind features in its excellent retention of color.



PPGI & PPGL COIL

- PPGI & PPGL

Thickness	0.13mm-0.8mm
Width	600mm-1250mm
Length	Support Customization
Color	According To Ral Color Card (Custom Patterns Can Be Provided)
Coating	PE/SMP/HDP/PVDF
Coating Thickness	Top: 10-30mic / Back: 5-25mic

					
RAL 6018	RAL 6005	RAL 5015	RAL 5005	RAL 1021	RAL 5005
					
RAL 3009	RAL 8017	RAL 7033	RAL 3005	RAL 9004	RAL 9010

We offer a variety of colors to choose from. The above are common colors. If you prefer other colors or patterns, please send us the RAL color code.



PRODUCT PACKAGING

Standard Export Seaworthy Package (Waterproof paper, and steel strip packed). Suit for all kinds of transport, or as required. Every cartons loaded with good shoring and strengthening. Use 6m loaded by 20ft container, 12m loaded by 40ft container. We will take container loading pictures and seal the container. Transportation speed is quick. And keep customer eachstep informed.



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