



# Xinghan Aluminum Product Catalogue

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STEEL



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# COMPANY

# PROFILE

Shandong Xinghan Aluminum Co., Ltd. is a comprehensive enterprise integrating production and trade, providing one-stop service to customers around the world. The company has advanced production equipment and technical teams, and continuously optimizes production processes and management models to ensure stable and reliable product quality and meet customer needs.

In the process of rapid development of today's society, our company, as always, adheres to the business philosophy of "quality first, integrity first" to survive, develop by quality, develop by reputation, customer-centered, market-oriented, and constantly Develop, forge ahead, strive to do better and become stronger.

Our company's product lines cover multiple series, among which stainless steel series, carbon steel series, aluminum series, copper series, galvanized steel series and color-coated products are our flagship products. The company is committed to providing customers with high-quality metal material solutions to meet the needs of various industries.

## PRODUCT INTRODUCTION

# ALUMINUM

Aluminum is a lightweight, corrosion-resistant metal with a density of  $2.7\text{g/cm}^3$ , a melting point of  $660.4^\circ\text{C}$ , and a boiling point of  $2467^\circ\text{C}$ . It has excellent thermal conductivity and good plasticity. It is one of the more abundant metals in the earth's crust and has a wide range of applications in industry and daily life. Aluminum has an excellent strength-to-weight ratio, making it ideal for manufacturing aircraft, automotive parts, construction materials, and more. In addition, aluminum is also widely used in the packaging industry, such as making cans, food packaging,

etc. Aluminum is considered a sustainable material because it can be recycled and benefits the environment. In general, aluminum plays an important role in various fields and has become one of the indispensable and important materials in modern industry and life.



# ALUMINUM PLATE



## PRODUCT DESCRIPTION

Aluminum plates are made with a thickness of more than 0.2mm and less than 500mm, a width of more than 200mm, and a length of less than 16m, called aluminum plates or aluminum sheets, less than 0.2mm are aluminum materials, and widths less than 200mm are called rows or strips (of course ,with the advancement of large-scale equipment progress, the maximum width of aluminum plate reaches 600mm).

Aluminum plate refers to a rectangular plate rolled from aluminum ingots. It is divided into pure aluminum plate, alloy aluminum plate, thin aluminum plate, medium-thick aluminum plate and patterned aluminum plate.



## APPLICATION AREA

Aluminum plates have important application value in various fields, including but not limited to: aerospace industry, automotive manufacturing industry, construction industry, electronics industry, chemical industry, food packaging industry, etc.



## PRODUCT PARAMETER

Product Name	Standard	Certification
Aluminum plate	ASTM, AISI, JIS, GB, DIN, EN	ISO, SGS, BV
Length	Width	Thickness
100-12000mm, or as required	20-3000mm, etc	0.1-400mm, etc
Surface finish		
mill,bright,polished,hair line,brush,sand Blast,checkered,embossed,etching,etc		
Grade		
1000 Series: 1050 1060 1070 1100 1200 1235 etc		
3000 Series: 3003 3004 3005 3104 3105 3A21 etc		
5000 Series: 5005 5052 5083 5086 5154 5182 5251 5754 etc		
6000 Series: 6061 6063 6082 6A02 etc		
7000 Series: 7050 7475 7075 etc		
Temper		
H12,H14,H16,H18,H20,H22,H24,H26,H28,H32,H36,H38,HO,H111,H112,H114,H116,H118,H321		
Payment terms	Loading port	
T/T, L/C at sight, Ali Pay	any port in China	
Packing		
standard export packing (inside:water proof paper,outside:steel covered with strips and pallets)		
Container size		
20ft GP:5898mm(Length)x2352mm(Width)x2393mm(High)		
40ft GP:12032mm(Length)x2352mm(Width)x2393mm(High)		
40ft HC:12032mm(Length)x2352mm(Width)x2698mm(High)		

# ALUMINUM COIL



## PRODUCT DESCRIPTION

Our aluminum coil products are made of high-quality aluminum alloy materials and processed through precise hot and cold rolling processes. These aluminum coils have excellent performance characteristics, including lightweight, high strength, corrosion resistance, excellent thermal conductivity, and easy processing and molding. Our aluminum coils are widely used in fields such as construction, aerospace, automotive manufacturing, and electronic products.

In the field of architecture, our aluminum coil products are used to make exterior wall panels, roof materials, insulation materials, etc., providing beautiful and durable solutions for buildings. In the aerospace field, our aluminum coils are widely used in key components such as aircraft structures and wings, ensuring the lightweight and high-strength requirements of flight components. In the field of automobile manufacturing, our aluminum coils are used to manufacture body panels, engine hood and other components, helping cars achieve energy conservation, emission reduction, and improved performance.

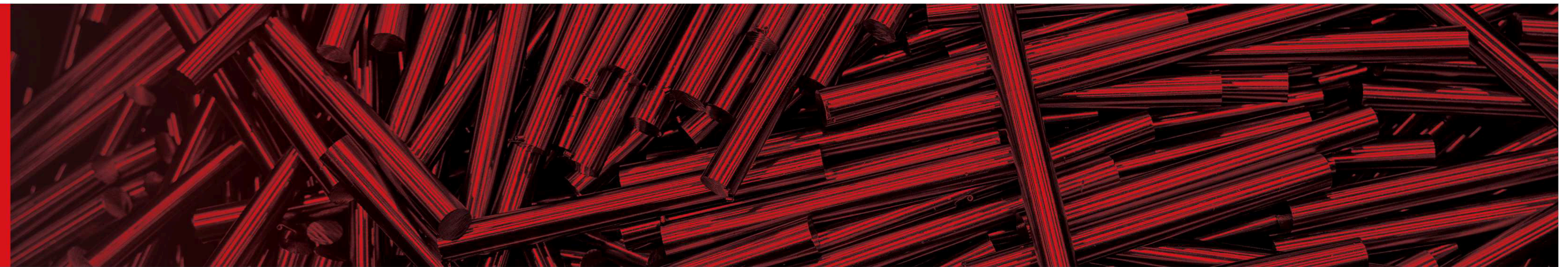
In addition, our aluminum coils can also be customized for production to meet specific customer needs. We can provide high-quality products and professional solutions for ordinary aluminum coils, aviation grade aluminum coils, automotive grade aluminum coils, and electronic grade aluminum coils. We are committed to providing customers with the highest quality aluminum coil products, helping various industries achieve better development and innovation.



## PRODUCT PARAMETER

Product Name	Standard	Certification
Aluminum coil	ASTM, AISI, JIS, GB, DIN, EN	ISO, SGS, BV
Length	Width	Thickness
100-12000mm, or as required	20-3000mm, etc	0.1-400mm, etc
Surface finish		
mill,bright,polished,hair line,brush,sand Blast,checkered,embossed,etching,etc		
Grade		
1000 Series: 1050 1060 1070 1100 1200 1235 etc		
3000 Series: 3003 3004 3005 3104 3105 3A21 etc		
5000 Series: 5005 5052 5083 5086 5154 5182 5251 5754 etc		
6000 Series: 6061 6063 6082 6A02 etc		
7000 Series: 7050 7475 7075 etc		
Temper		
H12,H14,H16,H18,H20,H22,H24,H26,H28,H32,H36,H38,HO,H111,H112,H114,H116,H118,H321		
Payment terms	Loading port	
T/T, L/C at sight, Ali Pay	any port in China	
Packing		
standard export packing (inside:water proof paper,outside:steel covered with strips and pallets)		
Container size		
20ft GP:5898mm(Length)x2352mm(Width)x2393mm(High)		
40ft GP:12032mm(Length)x2352mm(Width)x2393mm(High)		
40ft HC:12032mm(Length)x2352mm(Width)x2698mm(High)		

# ALUMINUM TUBE

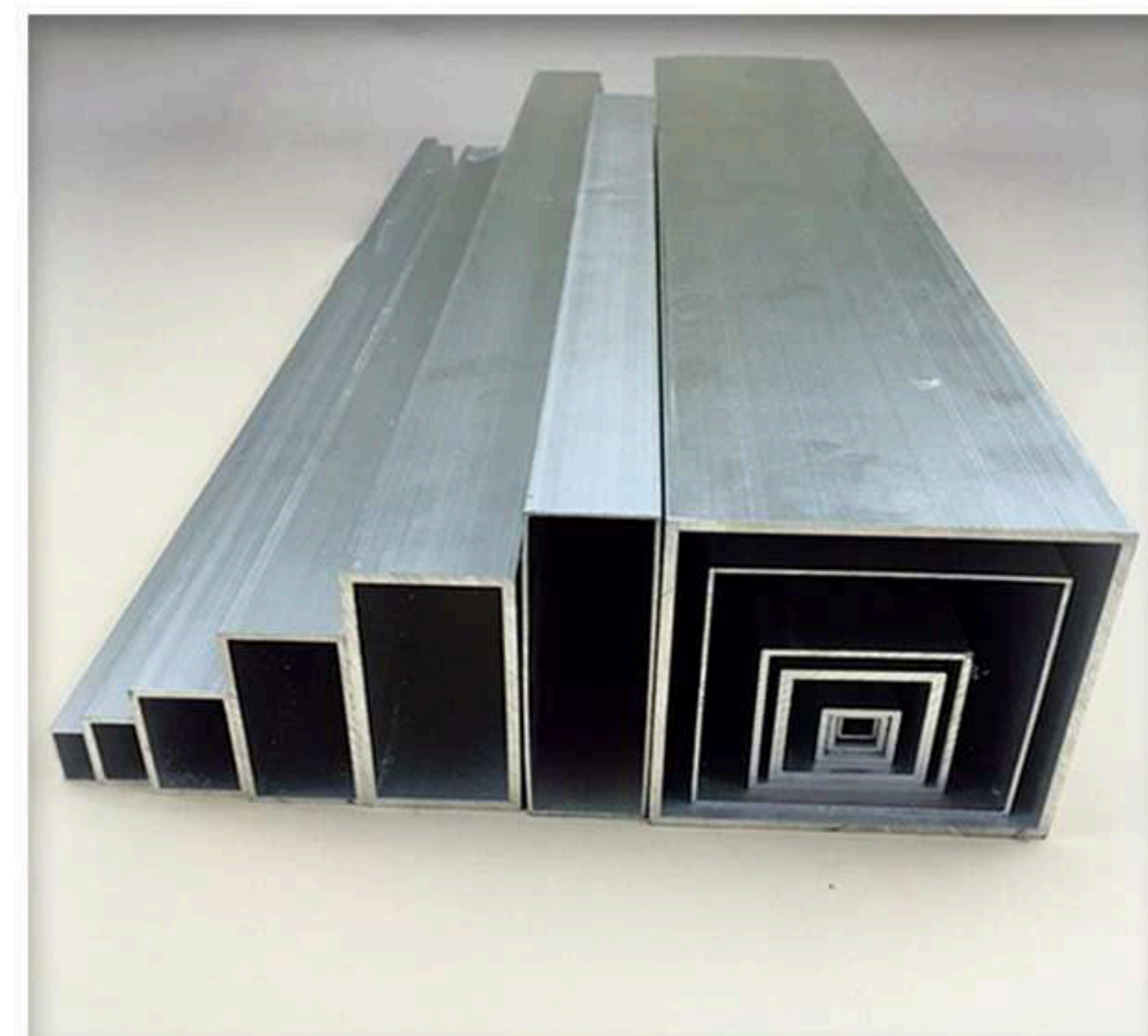


## PRODUCT DESCRIPTION

Aluminum tube is a kind of nonferrous metal tube, which refers to the metal tubular material extruded from pure aluminum or aluminum alloy to be hollow along its longitudinal full length.

According to the shape, it can be divided into square pipe, round pipe, rifled pipe, profiled pipe and universal aluminum pipe. It can be divided into seamless aluminum tube and ordinary extruded tube according to extrusion mode

The alloy aluminum tube profile is mainly produced by the extrusion method, the most commonly used extrusion processes are forward extrusion and reverse extrusion. Extruded alloy aluminum pipes and profiles adopt the production process of ingot heating-extrusion-finishing; for heat-treated aluminum alloys that can be strengthened, quenching and aging treatment are also required.



## APPLICATION AREA



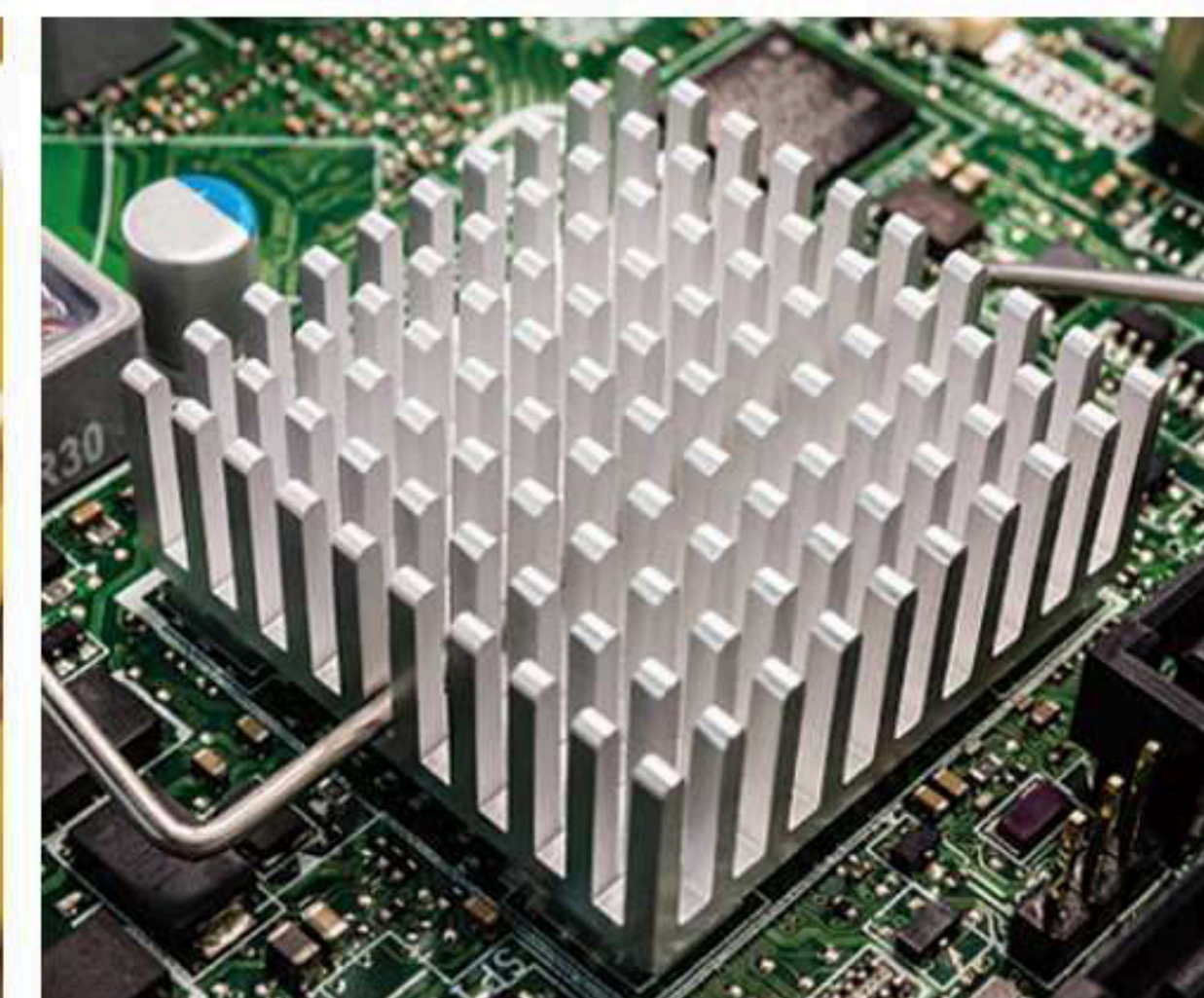
Air Conditioning Refrigeration



Automotive Manufacturing



Mechanical Equipment



Electronic Products

## PRODUCT PARAMETER

Product Name	Aluminum tube
Aluminium Alloy	ASTM B210, ASTM B234, ASTM B241, ASTM B483, GB/T 6893-2000, GB/T 4437-2000, JIS H4080-2006
Standard	ASTM, ASME, AMS, ASTM B210M, GB/T 3191, JIS H4040, ASTM B210, AMS QQ-A-200/9
Form	Aluminium extruded, seamless, drawn and coiled Pipe in Black & Bright Finish
Temper	O, H12, H14, H16, H18, H22, H24, H26, H32, H112
Material	1060, 1200, 1100, 2024, 2124, 3003, 3004, 5050, 5083, 5154, 5454, 5652, 5086, 5056, 5754, 6061, 6062, 6063, 7075, etc.
Pipe surface	Anodizing, Powder Coating, Liquid Coatings, Chemical Finishes, Mechanical Finishes, Pretreatment
Surface treatment	Nature, Black painting, Transparent oil, rust-proof black oil or hot-dip galvanized
Payment terms	T/T, L/C at sight, Ali Pay
Loading port	any port in China
Packing	Export standard package: bundled wooden box, suit for all kinds of transport or be required
Pipe Sizes	1/8" – 16" (3mm – 2500mm) OD .020" – 2" (.2mm – 150mm) wall (1m-12m) Length

# ALUMINUM ROD



## PRODUCT DESCRIPTION

Aluminum rod is a versatile aluminum product that undergoes a comprehensive process of melting and casting to obtain the required properties. The delicate process includes several key steps such as smelting, purification, impurity removal, degassing, slag removal and final casting procedures. This ensures that the aluminum rods produced meet high quality and functional standards for a wide range of applications.

In terms of shape, aluminum rods come in many forms to suit different requirements, including round aluminum rods, square aluminum rods, hexagonal aluminum rods, trapezoidal aluminum rods, etc. Each shape serves a specific purpose and offers unique benefits depending on the intended use.

The lightweight, corrosion resistance, and excellent conductivity of aluminum bars make them indispensable in many industries. They are widely used in the production of automotive engines and chassis structural components, marine equipment, high-efficiency conductive appliances, agricultural irrigation systems, structural support electromechanical equipment, and household products.



Round aluminum rod



Hexagonal aluminum rod



Square aluminum rod



Trapezoidal aluminum rod

## PACKAGING AND SHIPPING

Using international trade standard packaging or packaging requested by customers, and shipping according to international trade standards.



## PRODUCT PARAMETER

Product Name	Standard	Certification
Aluminum rod	EN, DIN, JIS, ASTM, BS, ASME, AISI	ISO9001, BV, DNV, CCS, ABSBalance
Length	Diameter	Technique
100 mm to 3000 mm, or as required	0.1 mm to 100 mm	Cold Drawn
Finish		
Black, Bright Polished, Rough Turned, NO.4 Finish, Matt Finish, BA Finish		
Grade		
1000 Series: 1050 1060 1070 1100 1200 1235 etc		
3000 Series: 3003 3004 3005 3104 3105 3A21 etc		
5000 Series: 5005 5052 5083 5086 5154 5182 5251 5754 etc		
6000 Series: 6005 6009 6010 6061 6063 6082 6201 6262 6463 6A02 etc		
7000 Series: 7050 7475 7075 etc		
Temper		
H12,H14,H16,H18,H20,H22,H24,H26,H28,H32,H36,H38,HO,H111,H112,H114,H116,H118,H321		
Payment terms	Loading port	
T/T, L/C at sight, Ali Pay	any port in China	
Packing		
standard export packing (inside:water proof paper,outside:steel covered with strips and pallets)		
Product Usage & Application		
Useful in Off-Shore Oil Drilling Companies, Power Generation, Gas Processing, Specialty Chemicals		
Pharmaceuticals, Pharmaceutical Equipment, Chemical Equipment, Sea Water Equipment, Heat Exchangers		
Petrochemicals, Condensers, Pulp and Paper Industry		

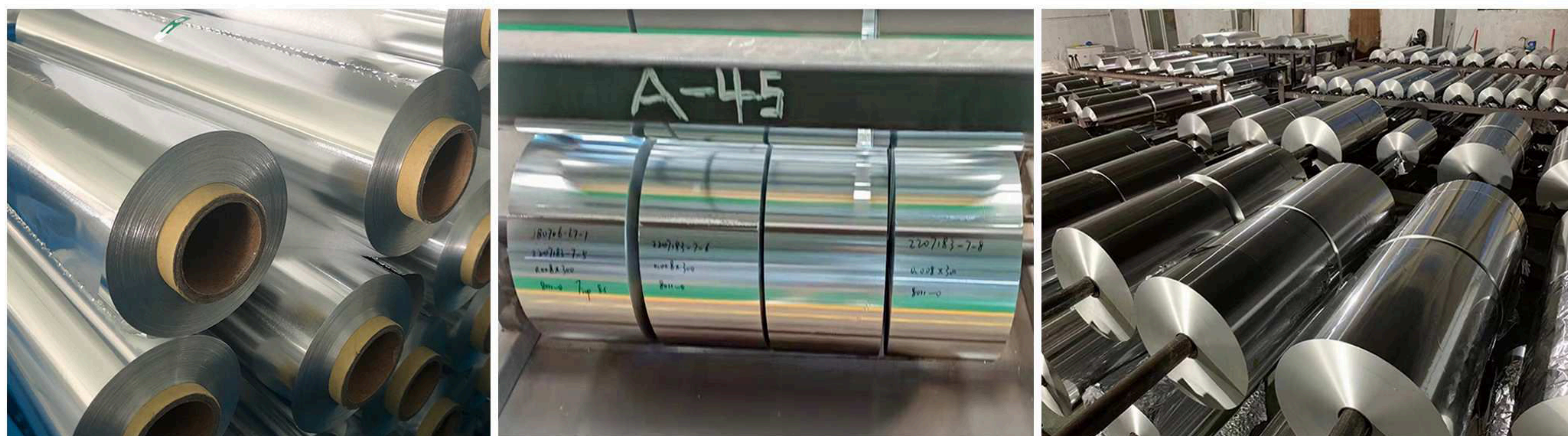
# ALUMINUM FOIL



## PRODUCT DESCRIPTION

Aluminum foil is a thin, lightweight, and bendable metal sheet. It is a sheet-like product made of pure aluminum or aluminum alloy, which is rolled and stretched multiple times on a rolling mill. It typically has excellent flexibility, thermal conductivity, insulation, and corrosion resistance, making it suitable for many different applications. Meanwhile, aluminum foil is also very energy-efficient and environmentally friendly. Aluminum foil material can be 100% recycled and reused, reducing the impact of waste on the environment.

Aluminum foil is widely used in food packaging, including chocolate, cheese, and candies, to maintain the freshness of food and extend its shelf life. In the construction industry, aluminum foil is used as insulation material for buildings, effectively preventing heat conduction and becoming a part of insulation or fire protection materials. In addition, aluminum foil is widely used in various fields such as medical device and drug packaging, electronic product manufacturing, cooking, and baking, becoming a universal and indispensable material.



## PACKAGING AND SHIPPING



## PRODUCT PARAMETER

Product Name	Standard	Certification	
Aluminum foil	ASTM, GB, JIS, AISI, EN	ISO9001, BV, DNV, CCS, ABSBalance	
Width	Thickness	Length	
120- 1500 mm (tolerance:± 1.0mm)	0.006mm(6micron) - 0.2mm (200micron)	5-300m	
Production Catalogue	Alloy	Temper	Size and usage
Household foil	8011, 1235, 8006	O	Thickness:0.009-0.03mm Width:250-1400mm
Lidding Foil	8011	O	Thickness:0.03-0.045mm Width:250-1400mm
Pharmacy Foil	8011	H18	Thickness:0.02-0.025mm Width:250-1400mm
Cold Forming Medicine Package Foil	8011, 8021	O	Thickness:0.045-0.075mm Width:250-1400mm
Lamination Foil (Food soft packing foil)	1235, 8011	O	Thickness:0.006-0.023mm Width:250-1400mm
Container Foil	3003, 8011	O, H22, H24	Thickness:0.04-0.12mm Width:250-1400mm
Decoration Foil	1100, 8011	H18	Thickness:0.01-0.15mm Width:250-1400mm
Aluminium food container	3003, 8011	H22, H24	Thickness:0.03-0.2mm N.W.:3-100G/PC
Household foil small rolls	1235, 8011, 8006, 8079	O	Thickness:0.008-0.60mm Width:100-1000mm Inner diameter:38mm Length:5-300M
Color Coated Aluminium coil (PPAL)	1050, 1060, 1100, 1235, 3003, 8011	H18	Thickness:0.013-0.14mm Width:1000-1400mm Inner diameter:152mm Outer diameter:1000-1500mm
Payment terms	Loading port		
T/T, L/C at sight, Ali Pay	any port in China		
Packing			
standard export packing (inside:water proof paper,outside:steel covered with strips and pallets)			
Application			
Aluminum foil is widely used in food, beverage, cigarette, medicine, photographic plate, household articles, etc. It is usually used as its packaging material, electrolytic capacitor materials, insulation materials for buildings, vehicles, ships and houses.			



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PRODUCT  
INTRODUCTION

# STAINLESS STEEL

Stainless steel is a metal material with excellent corrosion resistance and high strength, which is alloyed with iron, carbon and other elements. Its main features include anti-oxidation, corrosion resistance, high strength, and easy cleaning. Stainless steel is widely used in industry, construction, medical, kitchen appliances and other fields. In the industrial field, stainless steel is often used to manufacture chemical equipment, ship components, automobile parts, etc. Its corrosion resistance can extend the service life of equipment. In the field of construction, stainless steel is often used for indoor and outdoor decoration, handrails,

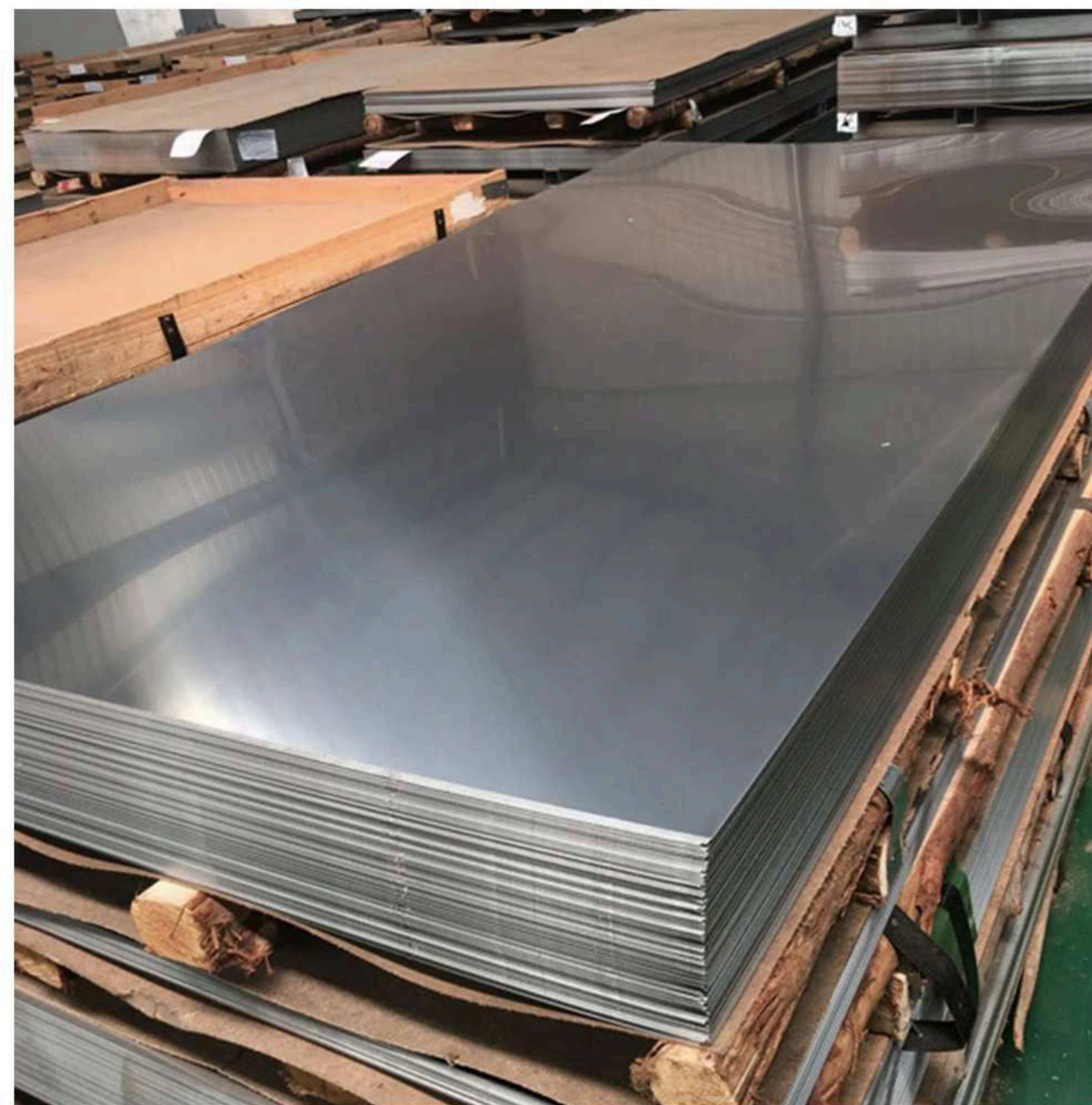
doors and windows, etc., giving buildings a modern feel and durability. In the medical field, stainless steel is widely used to manufacture surgical instruments, medical equipment, etc., and is favored for its sterile and easy-to-clean properties. At the same time, in the kitchen field, stainless steel kitchenware has become the first choice because of its corrosion resistance and easy cleaning. In general, stainless steel has become one of the indispensable and important materials in modern society with its excellent performance and diverse application fields.

# STAINLESS STEEL PLATE



## PRODUCT DESCRIPTION

Stainless steel plate is generally the general term for stainless steel plate and acid-resistant steel plate. It has a smooth surface, high plasticity, toughness and mechanical strength, and is resistant to corrosion by acid, alkaline gas solution and other media. It is an alloy steel that is not easy to rust, but it is not absolutely rust-free. Stainless steel plates refer to steel plates that are resistant to corrosion by weak media such as atmosphere, steam, and water, while acid-resistant steel plates refer to steel plates that are resistant to corrosion by chemically corrosive media such as acids, alkali, and salts.



## APPLICATION AREA

Stainless steel plates have many uses and are widely used in construction, shipbuilding, petroleum, chemical industry, military, electric power, food processing, medical care, boiler heat exchangers, mechanical hardware and other fields. Stainless steel plates can be made according to customer requirements.



## PRODUCT PARAMETER

Product Name		Standard	
Stainless steel sheet		ASME, ASTM, EN, BS, GB, DIN, JIS, etc	
Length	Width	Thickness	
1000mm-11000mm , or as required	8-3000mm	Cold rolled:0.15mm-10mm Hot rolled: 3.0mm-180mm	
Surface finish			
2B, 2D, 4B, BA, HL, MIRROR, brush, NO. 1-NO. 4, 8K, and so on			
Grade			
Mainly201,202,304,304L,304H,316,316L,316Ti,2205,330,630,660,409L,321,310S,410,416,410S,430,347H,2Cr13,3Cr13,etc			
300series:301,302,303,304,304L,309,309s,310,310S,316,316L,316Ti,317L,321,347			
200series:201,202,202cu,204			
400series:409,409L,410,420,430,431,439,440,441,444			
Others:2205,2507,2906,330,660,630,631,17-4ph,17-7ph, S318039 904L,etc			
Duplex stainless steel:S22053,S25073,S22253,S31803,S32205,S32304			
Special Stainless Steel:904L,347/347H,317/317L,316Ti,254Mo			
Temper			
H12,H14,H16,H18,H20,H22,H24,H26,H28,H32,H36,H38,HO,H111,H112,H114,H116,H118,H321			
Payment terms		Loading port	
T/T, L/C at sight, Ali Pay		any port in China	
Delivery time			
3-15 days subject to the clients' requirement and quantity			
Packing			
Clients' requirement and standard export sea-worthy packing			

# STAINLESS STEEL COIL



## PRODUCT DESCRIPTION

Stainless steel coil, renowned for its versatility and durability, is a ubiquitous material in a multitude of industries such as construction, automotive, and manufacturing. Crafted from premium-grade stainless steel, it boasts exceptional resistance to corrosion, heat, and impact. Typically wound into a coil for practical transportation and storage purposes.

Famed for its robustness and enduring nature, stainless steel coil is the go-to choice for applications that demand unwavering reliability and longevity. Its flexibility allows for seamless customization into various shapes and sizes, catering to the unique requirements of each project. Whether utilized in the production of kitchen appliances, architectural marvels, or industrial machinery, stainless steel coil exudes a contemporary and sophisticated aesthetic while upholding its structural integrity impeccably.



## PRODUCT PARAMETER

Product Name	Standard	Certification
Stainless steel coil	ASTM, JIS, AISI, GB, DIN, EN	ISO, SGS, BV
Width	Thickness	
40mm-600mm, 1000mm, 1219mm, 1500mm, 1800mm, 2000mm, 2500mm, 3000mm, 3500mm, etc	0.3-22mm	
Surface finish	Technique	Edge
BA, 2B, NO.1, NO.3, NO.4, 4K, HL, 8K	Cold Rolled \ Hot Rolled	Mill Edge \ Slit Edge
Grade		
410, 430, 201, 304, 304L, 321, 316, 316L, 317L, 347H, 309S, 310S, 904L		
ASTM UNS		
S32205, 2507, 254SMOS, 32760, 253MA, N08926, etc.		
1.4301, 1.4307, 1.4541, 1.4401, 1.4404, 1.4571, 1.4438, 1.4539, 1.4547		
1.4529, 1.4562, 1.4410, 1.4878, 1.4845, 1.4828, 1.4876, 2.4858, 2.4819		
Application		
Cargo tanks, Fittings, Heat exchangers, Hot water tanks, Hydraulic piping, Lifting and pulley equipment, Propellers, Shafts, etc.		
Payment terms	Loading port	
T/T, L/C at sight, Ali Pay	any port in China	
Packing		
In bundle, plastic bags, thin film, wooden pallet, standard seaworthy export packing or as customer demands		
Container size		
20ft GP: 5898mm(Length)x2352mm(Width)x2393mm(High) 24-26CBM		
40ft GP: 12032mm(Length)x2352mm(Width)x2393mm(High) 54CBM		
40ft HC: 12032mm(Length)x2352mm(Width)x2698mm(High) 68CBM		

# STAINLESS STEEL PIPE



## PRODUCT DESCRIPTION

Stainless steel pipes generally use three hardness indicators: Brinell, Rockwell and Vickers to measure their hardness.

Stainless steel pipes are divided into ordinary carbon steel pipes, high-quality carbon structural steel pipes, alloy structural pipes, alloy steel pipes, bearing steel pipes, stainless steel pipes, and bimetallic composite pipes, plated and coated pipes to save precious metals and meet special requirements. There are many types of stainless steel pipes with different uses, different technical requirements, and different production methods. The current production of steel pipes has an outer diameter range of 0.1-4500mm and a wall thickness range of 0.01-250mm.



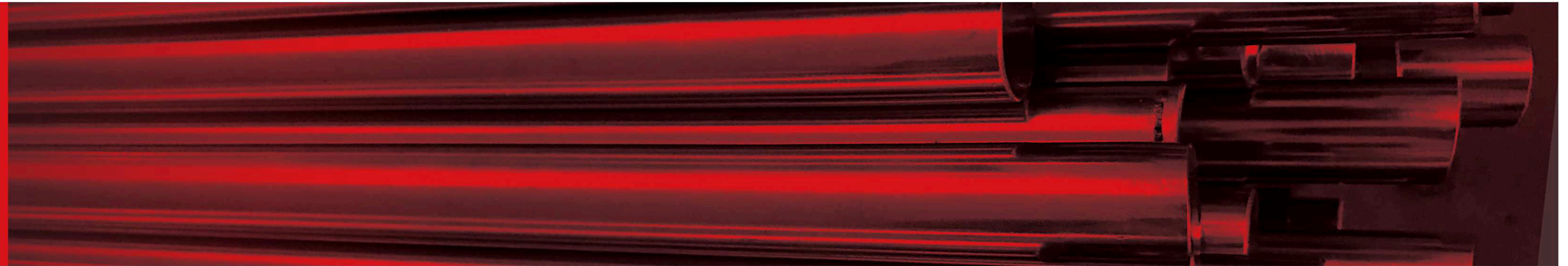
## APPLICATION AREA

Stainless steel pipes have excellent corrosion resistance, high temperature resistance, and mechanical properties, and are widely used in the fields of petrochemicals, food processing, building decoration, automotive manufacturing, and medical devices to ensure product quality and safety, improve corrosion resistance, and extend service life, providing reliable solutions for various industries.

## PRODUCT PARAMETER

Product Name	
Stainless Steel Pipe	
Standard	Certification
AISI, ASTM, DIN, JIS, BS, NB	SGS, BV, IQI, TUV, ISO, etc
Grade	
201, 202, 301, 302, 304, 304L, 310S, 316, 316L, 321, 430, 430A, 309S, 2205, 2507, 2520, 430, 410, 440, 904, or customized	
Surface	Technique
Polishing, Annealing, Pickling, Bright	Hot rolled / Cold rolled
Stainless steel round pipe	
Wall thickness	Outer diameter
1mm-150mm(SCH10-XXS) or as required	6mm-2500mm (3/8"-100") or as required
Stainless steel square pipe	
Wall thickness	Outer diameter
1mm-150mm(SCH10-XXS)	4mm*4mm-800mm*800mm
Length: 4000mm, 5800mm, 6000mm, 12000mm, or as required.	
Stainless steel rectangular pipe	
Wall thickness	Outer diameter
1mm-150mm(SCH10-XXS)	4mm*4mm-800mm*800mm
Payment terms	Loading port
T/T, L/C at sight, Ali Pay	any port in China
Packing	
Standard export seaworthy package, or as required.	

# ROUND STEEL



## PRODUCT DESCRIPTION

Round steel refers to solid strip steel with a circular cross-section, which is usually made of materials such as carbon steel and alloy steel, and has excellent strength and toughness. The process is divided into three types: hot rolling, forging, and cold drawing.

Hot rolled round steel with a specification of 5.5-250mm is widely used in fields such as mechanical manufacturing, building structures, bearing manufacturing, and automotive manufacturing. Among them, 5.5-25mm small round steel is mainly supplied in straight bars and bundles, and is commonly used as steel bars, bolts, and various mechanical parts; Round steel larger than 25 millimeters is mainly used for manufacturing mechanical parts and seamless steel pipe blanks. The surface of round steel can undergo processes such as heat treatment and galvanizing to improve corrosion resistance and surface hardness.

Round steel, as an important metal material, plays a crucial role in industrial production, providing strong and reliable material support for various industries. Its specifications are diverse, and different diameters and lengths can be customized according to customer needs to meet various engineering and manufacturing needs.



## PRODUCT PARAMETER

Product Name	
Round steel	
Standard	
ASTM B210, ASTM B234, ASTM B241, ASTM B483, GB/T 6893-2000, GB/T 4437-2000, JIS H4080-2006	
Grade	
200,300,400series, 201,202,301,304,309S,310S,316,316L,410,420,430,etc.	
Heat treatment	
Normalized ; Annealed ; Quenched ; Tempered	
Surface condition	
Black; Peeled; Polished; Machined; Grinded; Turned; Milled	
Delivery condition	
Forged; Hot rolled; Cold drawn	
Specification	
Round bar: Diameter: 3mm~800mm	Hexagonal: Size: 2mm~100mm
Square bar: Size: 4mm*4mm~100mm*100mm	Flat bar: Thickness: 2mm~100mm Width: 10mm~500mm
Angle bar: Size: 3mm*20mm*20mm~12mm*100mm*100mm	
Payment terms	Loading port
T/T, L/C at sight, Ali Pay	any port in China
Packing	
Export standard package: bundled wooden box, suit for all kinds of transport or be required	
Application	
Mechanical manufacturing, Building structures, Bearing manufacturing, Automotive manufacturing, Engineering construction, etc	

## PRODUCT INTRODUCTION

# CARBON STEEL

Carbon steel is a steel alloy containing carbon elements, typically ranging from 0.12% to 2.0%. Carbon steel has good processing performance, strength, and hardness, and is therefore widely used in many fields. According to the different carbon content, carbon steel can be divided into low carbon steel, medium carbon steel, and high carbon steel. Low carbon steel has high plasticity and weldability, and is commonly used in automotive manufacturing, building structures, and pipeline manufacturing. Medium carbon steel has moderate hardness and strength, making it suitable for manufacturing mechanical components and bearings. High carbon steel has excellent hardness and wear resistance, suitable for fields such as cutting tools, springs, and bearings. Overall, carbon steel plays an important role in manufacturing, construction, and other fields due to its diverse types and excellent performance.



# CARBON STEEL



## CARBON STEEL COIL

Carbon steel coil is mainly composed of iron, carbon, silicon, manganese, phosphorus, sulfur and other elements. Iron is the most dominant component, constituting more than 99% of the entire chemical composition. Its carbon content proportion is relatively high, around 0.2%, ensuring that the steel has a certain hardness and toughness. The addition of silicon, manganese and other elements enhances the strength and toughness of steel. The content of elements such as phosphorus and sulfur is low to ensure that the steel coil has good welding performance and corrosion resistance. Carbon steel coil has excellent mechanical properties, and its tensile strength, yield strength, elongation and impact toughness are all higher than ordinary steel.



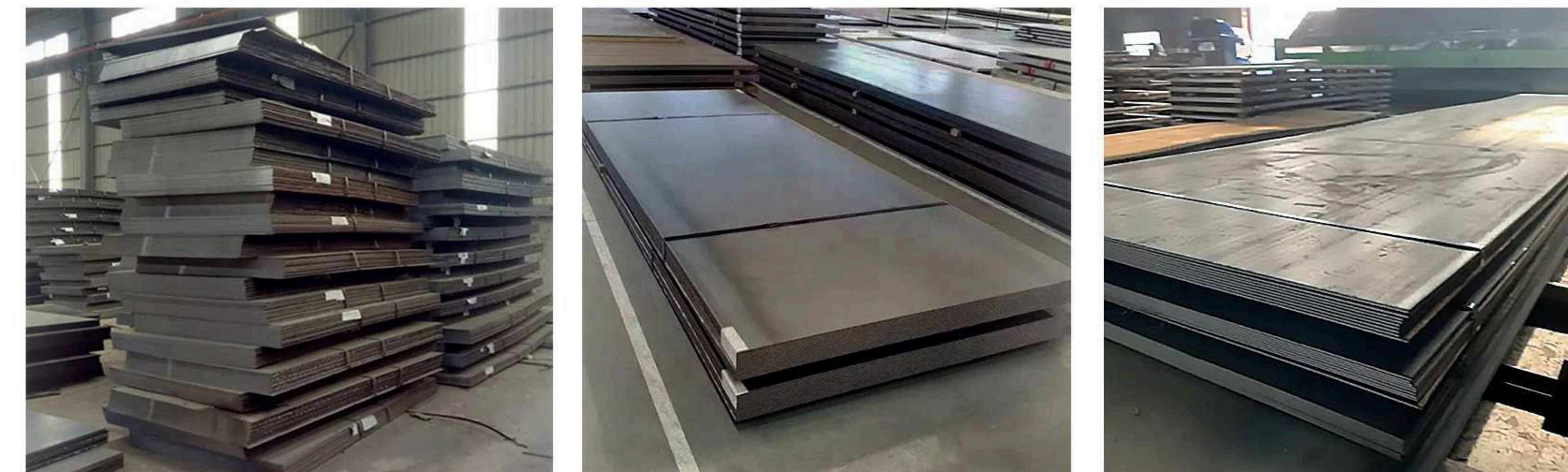
## PRODUCT PARAMETER

Product Name: Carbon Steel Coil		Technology: Hot rolled , Cold rolled , Colled drawn	
Length: 1-12m or as request	Width: 600-2000mm	Thickness: 0.15-30mm	
Material			
A36,A283,A285,Q195,Q215,Q235,Q345,Q345B,Q345C,Q345D,Q345E,Q390,Q390B,Q390C,Q390D,Q390E,Q420,Q420B,Q420C,Q420D,Q420E,Q460,Q460D,Q500C,Q500D,Q500E,Q550C,Q550D,Q550E,Q620C,Q620D,Q620E,Q690A,Q690B,Q690C,Q690D,Q690E,Q690D,Q690C,Q890C,Q890D;16Mo3,16MnL,16MnR,16Mng,16MnDR,ST12,ST13,ST14,ST37,SPCC,SPCD,SPCE,DC01,DC02,DC03,DC04,Sae 1010,S235Jr,Ck75,SS400,r.A.,.Gr.B,.Gr.C			

## CARBON STEEL PLATE

Carbon steel plate is an alloy material composed of carbon and iron, with a carbon content typically between 0.05% and 2.0%. The performance of carbon steel plates depends on the carbon content and the addition of other alloying elements. Generally, carbon steel plates have high strength and are suitable for applications that require high pressure and load bearing. The hardness of carbon steel plates is usually at a moderate level and can be adjusted through heat treatment or cold processing to meet different needs.

Compared to many other alloy steel materials, carbon steel plates have lower costs, good plasticity, and are easy to process into various shapes. They can be processed into the required shapes and sizes through processes such as cold bending, hot rolling, and cold rolling, thus having a competitive advantage in many large-scale applications.



## PACKAGING AND SHIPPING

Use common packaging for international trade or packaging required by customers, and deliver goods in accordance with international trade standards, etc.



## CARBON STEEL PIPE

Carbon steel pipes are made by piercing steel ingots or solid round steel into capillary tubes, which are then hot-rolled, cold-rolled or cold-rolled. Hot rolled carbon steel pipes are divided into general steel pipes, low and medium pressure boiler steel pipes, high-pressure boiler steel pipes, alloy steel pipes, stainless steel pipes, petroleum cracking pipes, geological steel pipes, and other steel pipes. Cold rolled (dialed) carbon steel pipes, in addition to general steel pipes, low and medium pressure boiler steel pipes, high-pressure boiler steel pipes, alloy steel pipes, stainless steel pipes, petroleum cracking pipes, and other steel pipes, also include carbon thin-walled steel pipes, alloy thin-walled steel pipes, stainless thin-walled steel pipes, and special-shaped steel pipes. Due to their different uses, carbon steel pipes have different shapes such as circular, square, rectangular, and elliptical.



### PRODUCT PARAMETER

Product Name		
Carbon Steel Pipe		
Outside Diameter	Wall Thickness	Length
30-900mm	0.15-30mm	5-12m
Standard		
API5L , ASTM A106 Gr.B, ASTM A53 Gr.B, ASTMA179/A192/A213/A210/370WP91,WP11,WP22 GB5310-2009,GB3087-2008,GB6479-2013,GB9948-2013, GB/T8163-2008, GB8162-2008,GB/T17396-2009		
Material		
20#, A53B, A106B, API 5L ST37.0,ST35.8,St37.2,St35.4/8,St42,St45,St52,St52.4 STP G38,STP G42,STPT42,STB42,STS42,STPT49,STS49		
Application		
1. Fluid pipe 2. Power Plant 3. Structure pipe 4. High and low pressure Boiler tube 5. Seamless pipe /tube for petroleum cracking 6. Conduit pipe 7. Scaffolding pipe pharmaceutical andship,building etc.		
The packaging adopts loose packaging, bundled packaging (maximum of 3 tons), bundled pipes with two lifting ropes at both ends for easy loading and unloading, and plastic covers at the ends or as required.		

## CARBON STEEL ROD

Carbon steel rod is a common metal material, which is divided into low carbon steel rod, medium carbon steel rod, and high carbon steel rod according to their different carbon content. After hot rolling or cold drawing, it can form various shapes of bars such as round, square, flat, and hexagonal for selection. Although the overall shape of hot-rolled and cold drawn bars is the same, their dimensional characteristics are vastly different. Hot rolled carbon steel bars are made by heating the steel billet to an appropriate temperature and rolling it into a relatively smooth surface, usually used for direct processing. Cold drawn carbon steel rod is a steel billet that is pulled into a rod shape at room temperature, with high dimensional accuracy and good surface quality, suitable for manufacturing precision components. Carbon steel rods are commonly used in fields such as mechanical manufacturing, building structures, and automotive manufacturing. The specific selection should be determined based on the specific purpose, performance requirements, and production process.



### PRODUCTION AND TRANSPORTATION



## REBAR

Steel reinforcement is a metal material used to reinforce concrete structures, with carbon steel being the most common material, mainly composed of carbon and iron, with a carbon content generally ranging from 0.2% to 0.9%. Steel bars are mainly used in the tensile parts of concrete structures, such as beams, slabs, columns, etc., to improve the tensile strength and bearing capacity of concrete. It can also be used for the shear, torsion, and compression parts of concrete structures to improve the overall performance of the structure. The specifications of steel bars are usually represented by diameter and length. Common diameters include 6mm, 8mm, 10mm, 12mm, and larger diameter steel bars. The length is usually 6 meters or 12 meters, and can also be customized according to needs. According to their shape and purpose, steel bars can be divided into ordinary steel bars, threaded steel bars, ribbed steel bars, etc. Twisted steel bars and ribbed steel bars have good bonding properties and are commonly used in projects with high requirements for concrete.



### PRODUCT PARAMETER

Product Name				
Rebar				
Grade	Nominal Diameter mm	$\sigma_s$ (or $\sigma_{p0.2}$ )Mpa	$\sigma_b$ MPa	$\delta_5\%$
HRB335	6-25 28-50	335	490	16
HRB400	6-25 28-50	400	570	14
HRB500	6-25 28-50	500	630	12
Payment terms		Loading port		
T/T, L/C at sight, Ali Pay		any port in China		
Package Delivery Of Rebar				

Generally package:Anti-water paper+strapped with min three .

Standard exporting package:Anti-water paper and plastic+covered by iron sheet+ strapped with min three strapping strips.

Excellent package: Anti-water paper and plastic film+ covered by iron sheet+ strapped with min three strapping strips+fixed on the iron or wooden pallets by strapping strips.

## WIRE ROD

Wire rod is usually made of steel containing carbon elements, with a carbon content generally between 0.05% and 2.0%. The performance of carbon steel depends on the carbon content and the addition of other alloying elements. In the manufacturing process, the metal billet is first heated and rolled, and then gradually pressed into the required diameter and shape through a series of molds and rollers. The mechanical properties and surface quality of the wire can also be adjusted by controlling parameters such as rolling temperature, stretching speed, and pressure during the rolling process. Its specifications are usually represented by thickness, width, and weight. Thickness is generally measured in millimeters, width in millimeters or inches, and weight in tons or kilograms. The thickness and width of the coil can be customized according to customer needs, with a common thickness range of 0.3mm to 10mm and a width range of 600mm to 2000mm.

Carbon wire rod has characteristics such as high strength, good processability, wear resistance, and weldability, making it suitable for various high-strength applications. It is now widely used in the construction industry, manufacturing industry, automotive industry, electrical industry, and mechanical manufacturing industry. Its high strength, good plasticity, and cost-effectiveness make it an indispensable material in many industrial applications.



### APPLICATION AREA



Construction industry

Manufacturing

Automotive industry

Electrical industry

# Carbon Steel Grade Comparison

China	Japan	Germany	Imperial	France	Italy	Spain	Sweden	USA		
GB	JIS	W-nr	DIN	BS	EN	AFNOR	UNI	UNE	SS	AISI/SAE
15	STKM 12A STKM 12C	1.0038	RSt37-2	4360 40 AC	-	E 24-2 Ne	-	-	1311	570.36
15	-	1.0401	C15	080M15	-	CC12	C15,C16	F.111	1350	1015
20	-	1.0402	C22	050A20	2C	CC20	C20,C21	F.112	1450	1020
Y15	SUM22	1.0715	9SMn28	2300M07	1A	S250	CF9SMn28	F.211 11SMn28	1912	1213
-	SUM22L	1.0718	9SMnPb28	-	-	S250Pb	CF9SMnPb28	11SMnPb28	1914	12L13
-	-	1.0722	10SPb20	-	-	10PbF2	CF10Pb20	10SPb20	-	-
Y13	-	1.0736	9SMn36	240M07	1B	S300	CF9SMn36	12SMn35	-	1215
-	-	1.0737	9SMnPb36	-	-	S300Pb	CF9SMnPb36	12SMnPb35	1926	12L14
15	S15C	1.1141	Ck15	080M15	32C	XC12	C16	C15k	1370	1015
25	S25C	1.1158	Ck25	-	-	-	-	-	-	1025
-	-	1.8900	StE380	4360 55 E	-	-	FeE390KG	-	2145	A572-60
35	-	1.0501	C35	060A35	-	CC35	C35	F.113	1550	1035
45	-	1.0503	C45	080M46	-	CC45	C45	F.114	1650	1045
-	-	1.0726	35S20	212M36	8M	35MF4	-	F210G	1957	1140
40MN	-	1.1157	40Mn4	150M36	15	35M5	-	-	-	1039
35Mn2	SMn438	1.1167	36Mn5	-	-	40M5	-	36Mn5	2120	1335
30Mn	SCMn1	1.1170	28Mn6	150M28	14A	20M5	C28Mn	-	-	1330
35Mn	S35C	1.1183	Cf35	060A35	-	XC38TS	C36	-	1572	1035
Ck45	S45C	1.1191	Ck45	080M46	-	XC42	C45	C45K	1672	1045
50	S50C	1.1213	Cf53	060A52	-	XC48TS	C53	-	1674	1050
55	-	1.0535	C55	070M55	9	-	C55	-	1655	1055
60	-	1.0601	C60	080A62	43D	CC55	C60	-	-	1065
55	S55C	1.1203	Ck55	070M55	-	XC55	C50	C50K	-	1055
60Mn	S58C	1.1221	Ck60	080A62	43D	XC60	C60	-	1678	1060
-	-	1.1274	Ck101	060A96	-	XC100	-	F.5117	1870	1095
-	SK3	1.1545	C105W1	BW1A	-	Y105	C36KU	F.5118	1880	W1
-	SUP4	1.1545	C105W1	BW2	-	Y120	C120KU	F.515	2900	W210

## A Steel Manufacturing Plant

Welcome to Shandong Xinghan Steel Co., Ltd.

Our steel products have widely exported to Northeast, North China, East China, Middle East, Southeast

Asia, Australia, Europe, more than 100 countries and regions.

Companies adhere to the "integrity-based, cooperation and win-win" concept, praised by customers at home and abroad.

Xinghan is looking forward to working with you to create success together.

—  
PRODUCT  
INTRODUCTION

# BUILDING PROFILES

Architectural profiles refer to various profiles made of steel materials used in building structures, including angle steel, channel steel, H-shaped steel and I-shaped steel. These profiles usually have high strength, stability, and durability, which can effectively support and form the skeleton structure of buildings. Steel building profiles are widely used in modern architecture, especially in large industrial plants, commercial buildings, and bridges. Due to its strong plasticity, convenient construction, and good seismic resistance, steel building profiles play an important role in building design. At the same time, building

profiles are also widely used in sustainable building design because they can be recycled and generate less waste in construction, which is in line with environmental protection concepts. Overall, steel building profiles play an important role in modern architecture, providing a solid foundation for the stability and sustainable development of building structures.

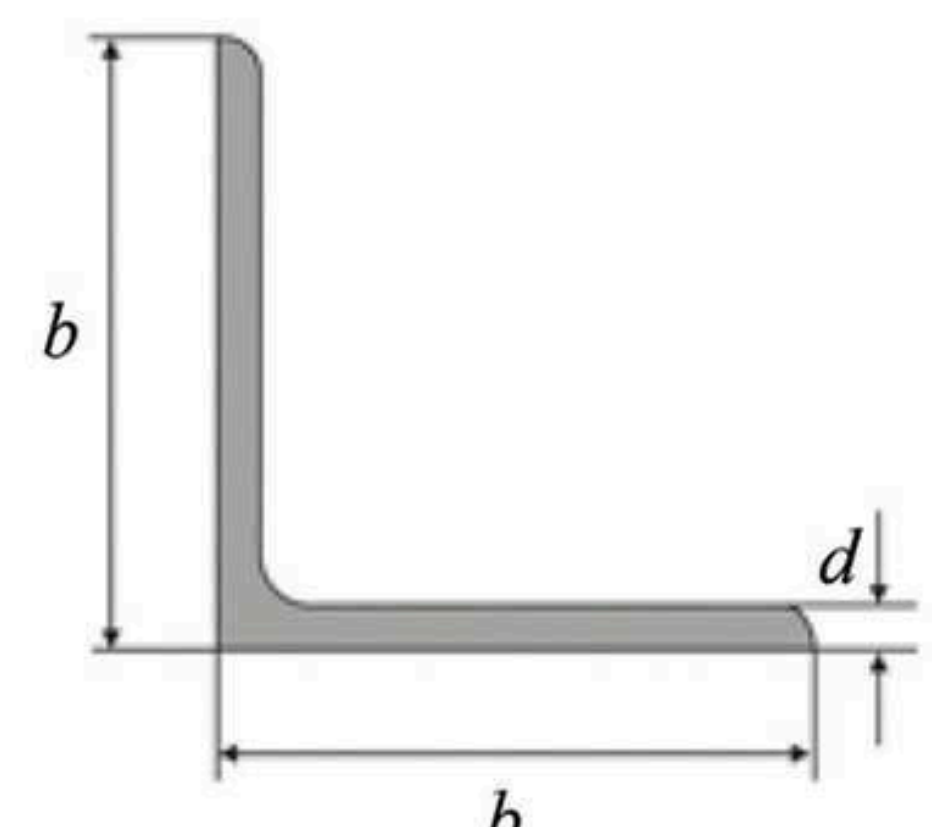
# HOT ROLLED EQUILATERAL ANGLE STEEL

Angle steel, carbon structural steel for construction, is simple section steel. When used, it is required to have better weldability, plastic deformation performance and certain mechanical strength. According to the different needs of structure, a variety of stress components can be made, and it can also be used as a connecting member between components. It is widely used in all kinds of structure of architecture and engineering, such as housing beams, bridges, transmission towers, hoisting and transporting machinery, ships, industrial furnaces, reaction towers, container shelves, cable trench supports, power piping, installation of bus structure, and warehouse shelves.

## Supply Technical Conditions

Specification	Main dimension (mm)		Supply standard	
	Length of a side b	Thickness of a side d		
18	180	12	GB/T706	
		14		
		16		
		18		
20	200	14		
		16		
		18		
		20		
22	220	24		
		16		YB/T 4163 GB/T706
		18		
		20		
25	250	22		
		24		
		26		
		28		
		30		
		32		
		35		

## Allowable Deviation of Sectional Dimension

Item	Allowable deviation	Schematic diagram of section
Length of a side	≤56	
	> 56~90	
	> 90~140	
	> 140~200	
	> 200	
≤56		

Thickness of a side	> 56~90	±0.6
	> 90~140	±0.7
	> 140~200	±1.0
	> 200	±1.4

# I-BEAM & CHANNEL STEEL

I-shaped and channel steel have high tensile strength and toughness. When used in high-rise buildings, bridges and other steel structures, it has good cold bending and welding performance, and good quality control of cross-section size and surface, so it is widely used in vehicle manufacturing, large-scale bridge construction, machinery manufacturing and industrial building components and other industries.

## Technical Conditions for Supply of I-shaped Steel

Specification	Main dimension mm			Supply standard
	Height h	Leg thickness b	Waist thickness d	
25a	250	116	8.0	GB/T706
25b	250	118	10.0	
28a	280	122	8.5	
28b	280	124	10.5	
32a	320	130	9.5	
32b	320	132	11.5	
32c	320	134	13.5	
36a	360	136	10.0	
36b	360	138	12.0	
36c	360	140	14.0	
40a	400	142	10.5	
40b	400	144	12.5	
40c	400	146	14.5	
45a	450	150	11.5	
45b	450	152	13.5	
45c	450	154	15.5	
50a	500	158	12.0	
50b	500	160	14.0	
50c	500	162	16.0	

## Technical Conditions for Supply of Channel Steel

Specification	Dimension (mm)			Supply standard
	Height h	Leg thickness b	Waist thickness d	
25a	250	78	7.0	GB/T706
25b	250	80	9.0	
25c	250	82	11.0	
28a	280	82	7.5	
28b	280	84	9.5	
28c	280	86	11.5	
32a	320	88	8.0	
32b	320	90	10.0	

32c	320	92	12.0	GB/T706
36a	360	96	9.0	
36b	360	98	11.0	
36c	360	100	13.0	
40a	400	100	10.5	
40b	400	102	12.5	
40c	400	104	14.5	

### Allowable Deviation of Sectional Dimension of I-shaped Steel

Item	Allowable deviation (mm)	Schematic diagram of section	
Height h (mm)	< 100	± 1.5	
	100 ~ < 200	± 2.0	
	200 ~ < 400	± 3.0	
	≥ 400	± 4.0	
Leg thickness b (mm)	< 100	± 1.5	
	100 ~ < 150	± 2.0	
	150 ~ < 200	± 2.5	
	200 ~ < 300	± 3.0	
	300 ~ < 400	± 3.5	
	≥ 400	± 4.0	
Waist thickness d (mm)	< 100	± 0.4	
	100 ~ < 200	± 0.5	
	200 ~ < 300	± 0.7	
	300 ~ < 400	± 0.8	
≥ 400	± 0.9		

## H-SHAPED STEEL

H-shaped steel is a kind of economic section beam derived from I-shaped steel. The distribution of section area of H-shaped steel is more optimized. It has the advantages of light weight, good compression and bending resistance, large bearing capacity, etc. It is convenient to construct and can be directly assembled and combined into components. H-shaped steel is widely used in the field such as factory buildings, high rise building, bridge, ship, lifting transport machinery and so on.

### Technical Conditions for Supply of Representative Model

Specification	Main dimension (mm)				Supply standard
	Height H	Flange width B	Waist thickness t1	Flange thickness t2	
HW200×200	200	200	8	12	GB/T11263
	200	204	12	12	
HW250×250	244	252	11	11	
	250	250	9	14	
HW300×300	250	255	14	14	
	294	302	12	12	
	300	300	10	15	
	300	305	15	15	

HW300×300	294	302	12	12	GB/T11263
	300	300	10	15	
	300	305	15	15	
HM250×175	244	175	7	11	
HM300×200	294	200	8	12	
HM600×300	582	300	12	17	
	298	149	5.5	8	
HN300×150	300	150	6.5	9	
	346	174	6	9	
HN350×175	350	175	7	11	
	400	150	8	13	
HN400×150	396	199	7	11	
	400	200	8	13	

### Allowable Deviation of Sectional Dimension

Item	Allowable deviation mm	Schematic diagram of section		
Height H	< 400	±2.0		
	≥ 400 ~ < 600	±3.0		
Width B	< 100	±2.0		
	≥ 100 ~ < 200	±2.5		
	≥ 200	±3.0		
Thickness t1, t2	< 5	±0.7		
	≥ 5 ~ < 16	±1.0		
	≥ 16 ~ < 25	±1.5		
Flange slope T	(Model) Height ≤ 300	T ≤ 1.0%B		
	(Model) Height > 300	T ≤ 1.2%B		
Curvature	(Model) Height ≤ 300	Less than the length of the 0.15%	Suitable for large upper and lower bending and left and right bending	
	(Model) Height > 300	Less than the length of the 0.10%		
Center deviation S	(Model) Height ≤ 300 or width ≤ 200	±2.5		
	(Model) Height > 300 or width ≤ 200	±2.5		
End slope e	e ≤ 1.6% × (H 或 B) e ≤ 1.6% × (H or B)			

# APPLICATION AREA

## HOT ROLLED EQUILATERAL ANGLE STEEL

Hot rolled equilateral angle steel is used in a wide variety of building and engineering structures such as beams, bridges, transmission towers, lifting and transportation machinery, ships, industrial furnaces, reaction towers, container racks and warehouses.



## I-BEAM & CHANNEL STEEL

I-beams, also known as steel beams, are long strips of steel with an I-shaped cross-section. There are three types of I-beams: ordinary I-beams, light I-beams, and H-beams. I-beams are widely used in various building structures, bridges, vehicles, brackets, machinery, etc.



Channel steel is a long steel with a groove-shaped cross-section, which is a carbon structural steel for construction and machinery, and is a section steel with complex cross-section, and its cross-sectional shape is groove-shaped. Channel steel is mainly used in building structures, curtain wall engineering, fixed panels, mechanical equipment and vehicle manufacturing.



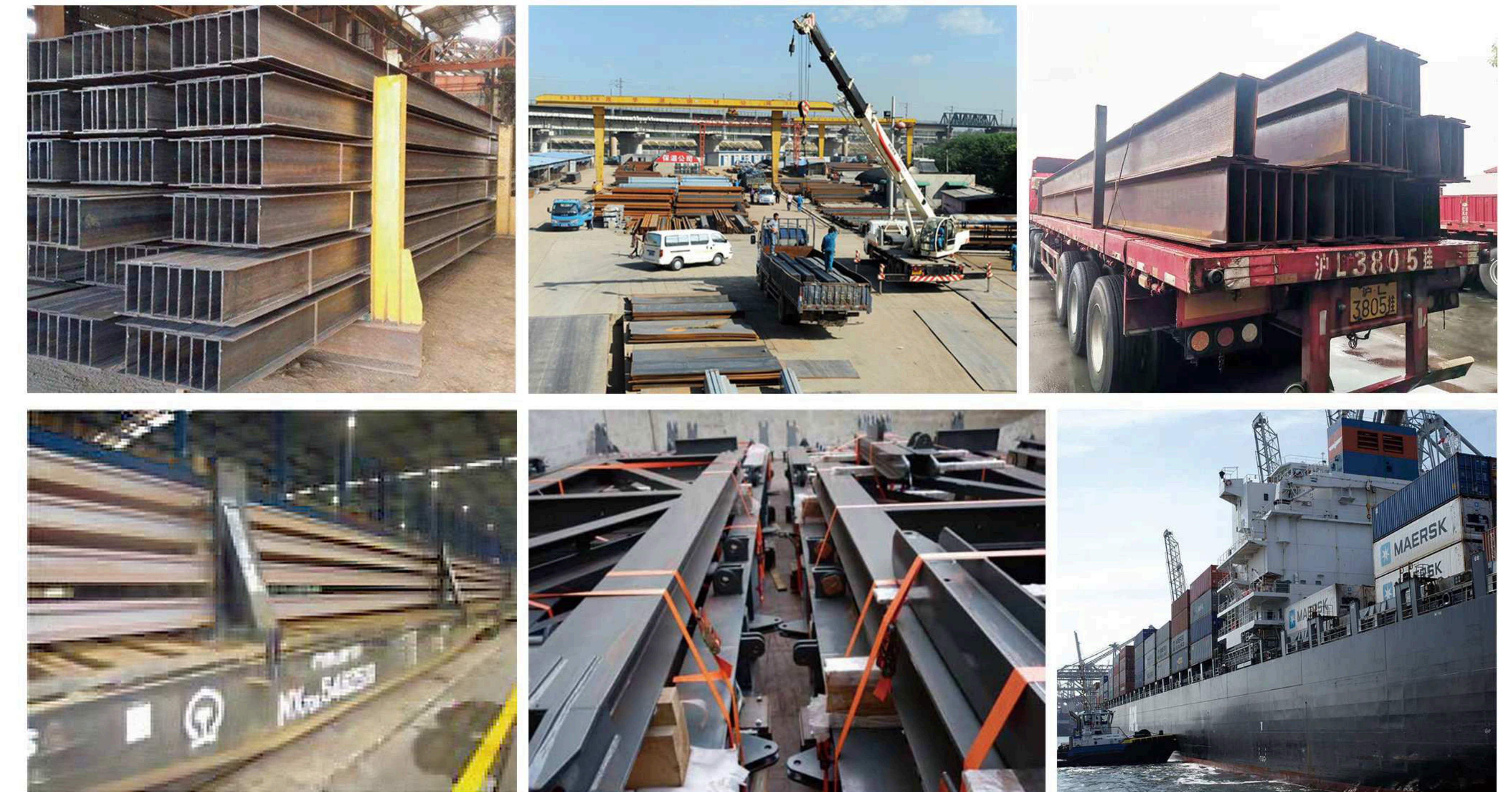
## H-SHAPED STEEL

H-beam is a kind of high-efficiency section of the economic section with more optimized cross-sectional area allocation and more reasonable strength-to-weight ratio, which is named because its cross-section is the same as the English letter "H". H-beam is mainly used for beams and columns in industrial and civil structures, such as: steel structure load-bearing supports for industrial structures, steel piles and supporting structures for underground engineering, industrial equipment structures such as petrochemical industry and electric power, long-span steel bridge components, frame structures for shipbuilding and machinery manufacturing, girder supports for trains, automobiles and tractors, port conveyor belts, high-speed baffle supports, etc.



# PACKAGING AND SHIPPING

Using international trade standard packaging or packaging requested by customers, and shipping according to international trade standards.





## PRODUCT INTRODUCTION

# GALVANIZED STEEL

Galvanized steel is a type of steel that has undergone hot-dip galvanizing treatment, and its surface is covered with a layer of zinc metal to enhance the corrosion resistance and durability of the steel. Hot dip galvanizing is the process of immersing steel into molten zinc to form a metal compound layer between steel and zinc, thereby forming an effective protective coating. It is widely used in fields such as building structures, automobile manufacturing, furniture manufacturing, agricultural equipment, etc. It can provide reliable protection in both indoor and outdoor environments and is a multifunctional and durable steel product.

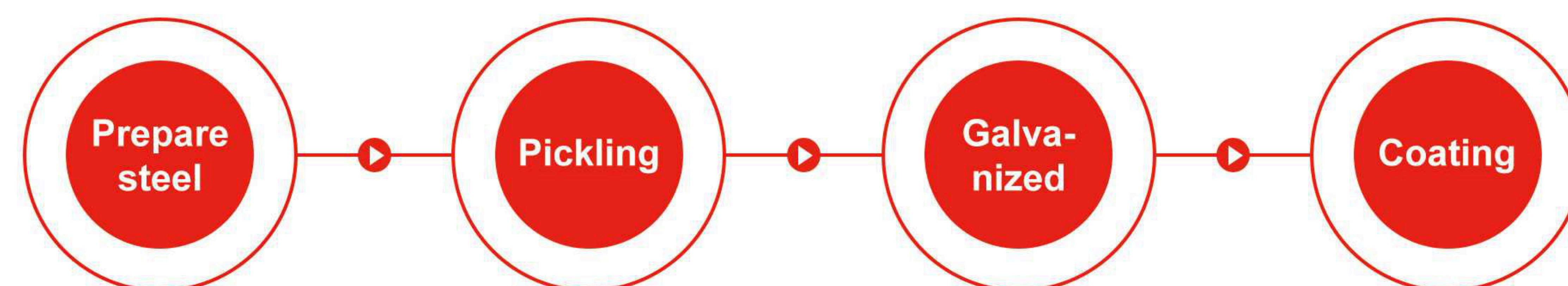


## ■ PRODUCT DESCRIPTION

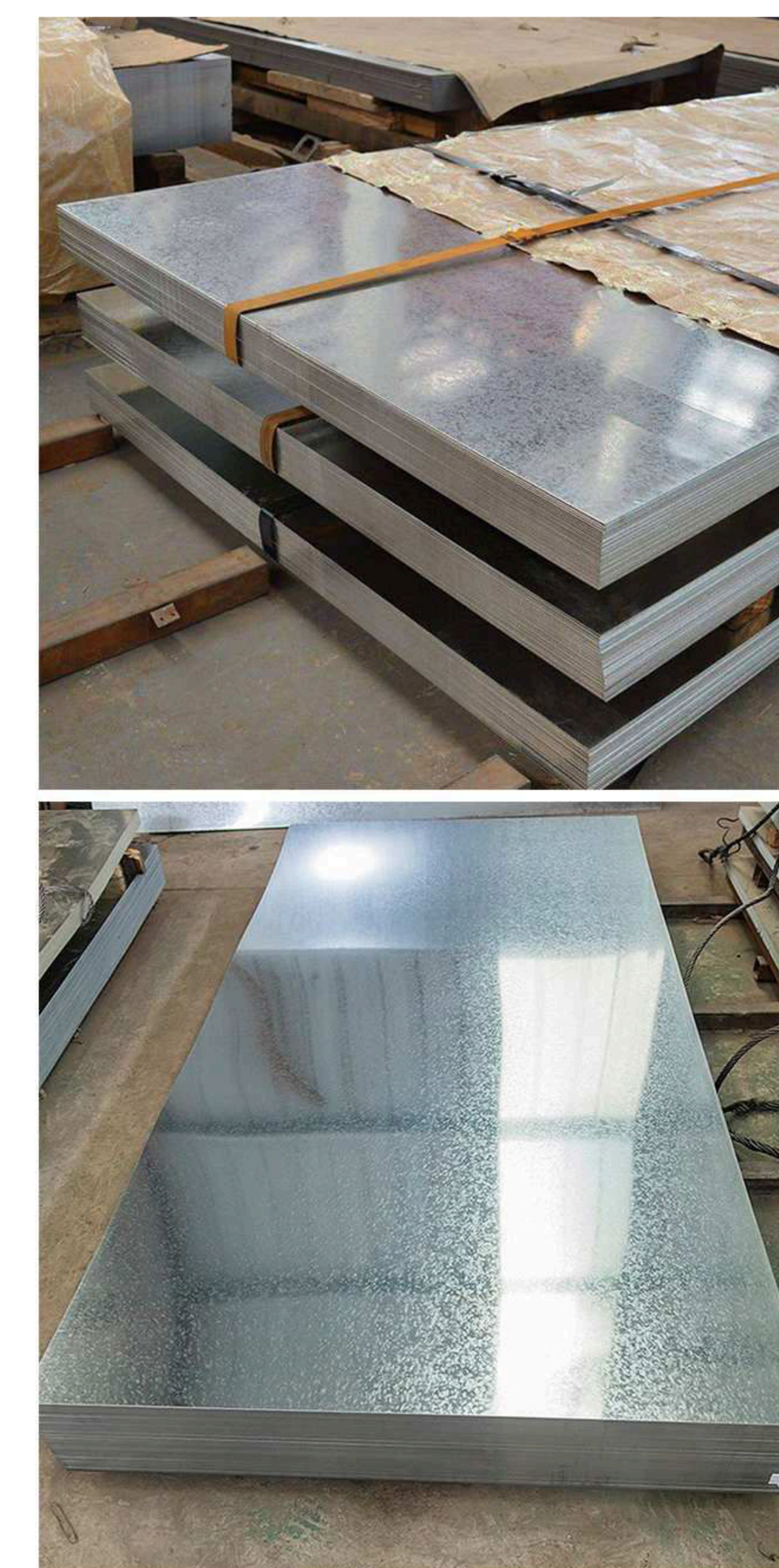
Galvanized steel coil is a product that prevents oxidation and corrosion of steel by coating a layer of zinc on the surface of the steel. Galvanized steel coils are usually composed of two parts: the substrate and the galvanized layer. The substrate is the main body of galvanized steel coils, usually made of carbon steel or low alloy steel, which has good mechanical and processing properties and is suitable for various industrial applications. Galvanized layer is a zinc coating formed on the surface of the substrate to prevent oxidation and corrosion of steel. It can be divided into two methods: hot-dip galvanizing and electrogalvanizing. Both methods can effectively protect steel from oxidation and corrosion, and extend its service life. The galvanized layer thickness of conventional galvanized steel coils is generally above 20mm, while the galvanized layer thickness of thin galvanized steel coils is relatively thin, generally between 5-20mm.



## ■ PRODUCTION PROCESS



## ■ PRODUCT DESCRIPTION



Galvanized steel plate is a type of steel plate that has been galvanized and covered with a layer of zinc metal to enhance the corrosion resistance of the steel. Galvanized steel plates can be prepared by the process of hot-dip galvanizing or electrogalvanizing. Hot dip galvanized steel plate has a thicker galvanized layer, which has better corrosion resistance and is suitable for situations with high corrosion requirements; The galvanized layer of galvanized steel plate is relatively thin, but the surface is smooth and uniform, suitable for occasions with high appearance requirements. Galvanized steel plates are commonly used in environments that require oxidation and corrosion resistance, and are widely used in fields such as construction, automotive manufacturing, household appliances, and industrial equipment. The production process of galvanized steel plate is relatively environmentally friendly, and the steel itself can be recycled, which has good sustainability.

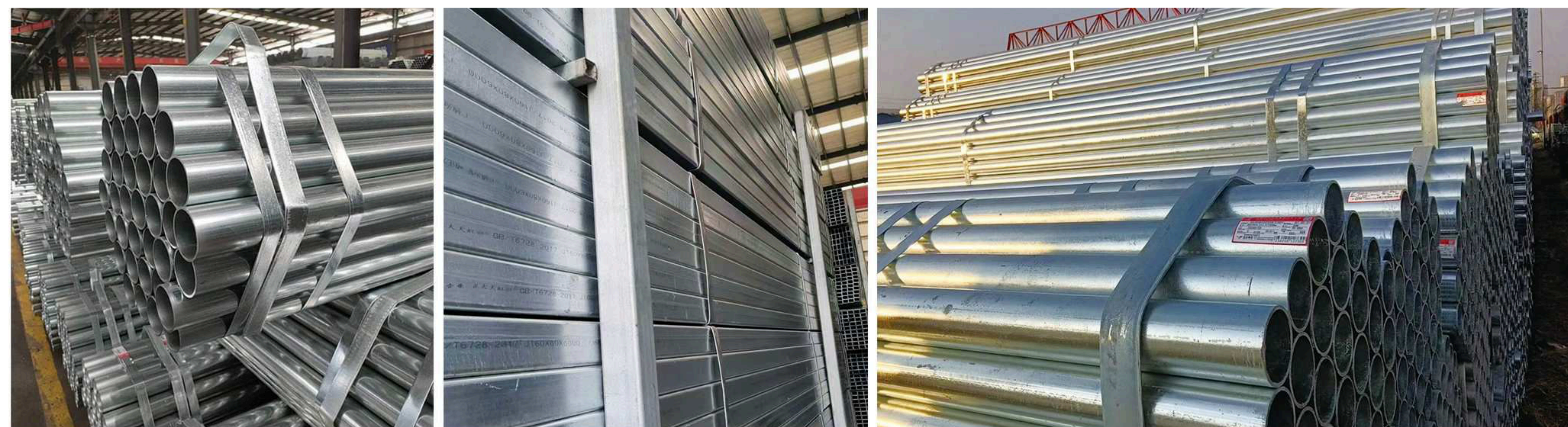
Galvanization refers to the rust prevention method of laying metallic zinc on the surface of iron or steel. Zinc is a highly corrosion-resistant metal that can isolate iron from oxygen and water, preventing the chemical reactions required for rust to occur. Due to the higher metal activity of zinc compared to iron, even if the zinc plating is damaged, zinc can still prevent rusting through sacrificial electrochemical protection.





### ■ PRODUCT DESCRIPTION

One of the main features of galvanized steel pipe is its good corrosion resistance. The galvanized layer can effectively prevent oxidation and corrosion on the surface of steel pipes and extend the service life of steel pipes. Galvanized steel pipes have good pressure resistance and are suitable for use in various projects where pressure and load are required. Its production process is relatively environmentally friendly, and the steel itself can be recycled, making it highly sustainable. Galvanized steel pipes are widely used in construction engineering, transportation pipelines, machinery and equipment manufacturing and other fields. They are easy to install and have low maintenance costs. They usually only need regular cleaning and painting to protect the galvanized layer to maintain good condition.



### ■ APPLICATION AREA



Construction engineering



Transportation pipeline



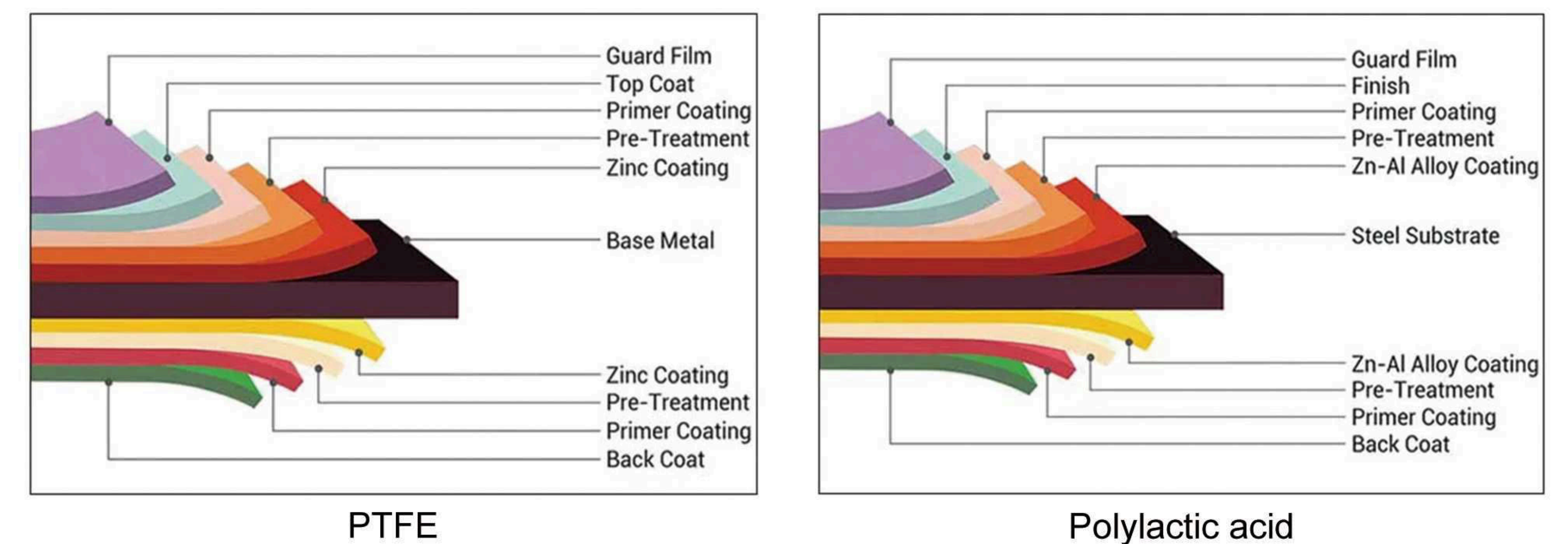
Mechanical equipment manufacturing



### ■ PRODUCT DESCRIPTION

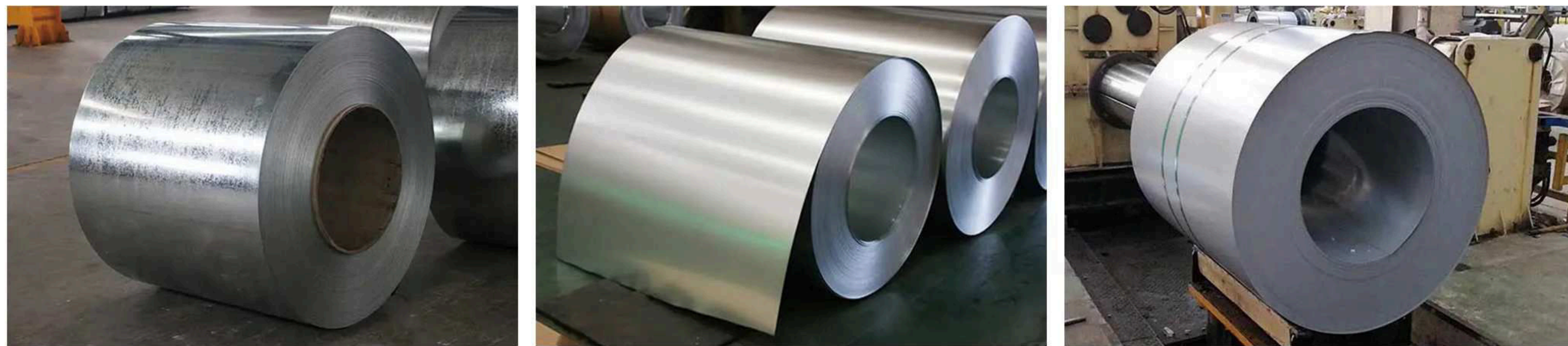
PPGI and PPGL (color coated galvanized steel sheet and color coated galvanized steel sheet), also known as pre coated steel sheet or color coated steel sheet coil, are made up of hot-dip galvanized steel sheet, hot-dip galvanized steel sheet, and electroplated galvanized steel sheet. After surface pretreatment, one or several layers of organic coating are applied to the surface, then baked and cured. The color steel plate coil is lightweight, has a beautiful appearance, good anti-corrosion performance, and can be directly processed. The colors are usually divided into gray, navy blue, brick red, etc. It is mainly used in advertising, construction, decoration, household appliances, appliances, furniture industry, and transportation industry. The coating used for color coated steel coils is based on the selection of resin environments, such as polyester modified with silicone, polyvinyl chloride plasticizer, polyvinylidene chloride, etc.

### ■ STRUCTURAL DIAGRAM



The production processes of PPGI (pre-coated color steel plate) and PPGL (pre-coated galvalume steel plate) are similar to a large extent, but there are some subtle differences due to differences in coating composition and coating preparation processes.

## ■ SUBSTRATE TYPE



Hot-dip galvanized steel

Hot dip aluminum zinc iron parts

Electroplated zinc steel

## ■ COATING TYPE

**Polyester (PE):** Good adhesion, rich colors, wide range of formability and outdoor durability, moderate chemical resistance, and low cost.

**Silicon modified polyester (SMP):** Good wear resistance and heat resistance, as well as good external durability and powder resistance, light retention, general flexibility, and moderate cost.

**High Durability Polyester (HDP):** Excellent color retention and UV resistance, excellent outdoor durability and resistance to crushing, good paint film adhesion, rich colors, and excellent cost-effectiveness.

**Polyvinylidene fluoride (PVDF):** Excellent color retention and UV resistance, excellent outdoor durability and powdering resistance, excellent solvent resistance, good moldability, stain resistance, limited color and high cost.

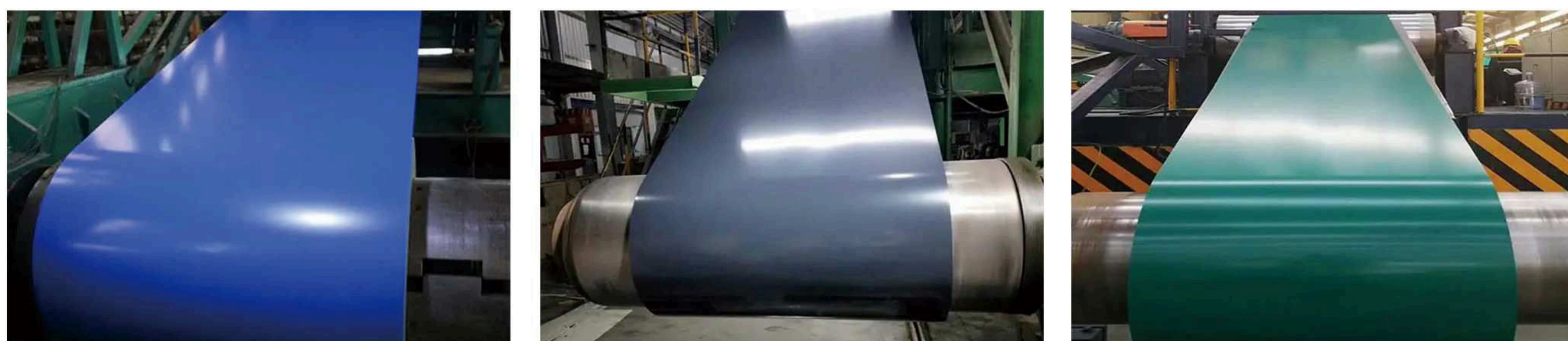
**Polyurethane (PU):** Polyurethane coatings have the characteristics of high wear resistance, high corrosion resistance, and high damage resistance. Under normal circumstances, the shelf life exceeds 20 years. It is mainly used in buildings with severe environmental corrosion.



Anti static painted steel coil

Thermal control color coated steel coil

Self cleaning color coated steel coil



Animal husbandry painted steel coils

Color coated steel coils resistant to hydrogen peroxide

Anti corrosion painted steel coil

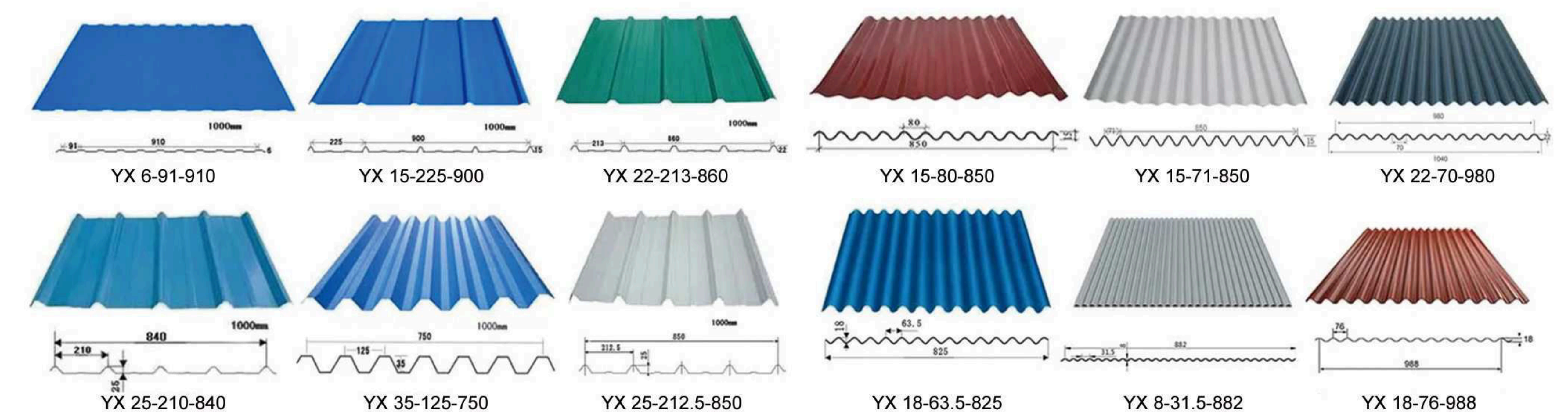


## ■ PRODUCT DESCRIPTION

Pressed corrugated steel sheet (roofing sheet) refers to the steel sheet formed by cold pressing or cold rolling. The steel sheet is made of coloured steel sheet, galvanized steel sheet, stainless steel sheet, aluminium sheet, anticorrosive steel sheet or other thin steel sheet. The profiled steel sheet has the characteristics of light weight, high strength, low price, good seismic performance and beautiful appearance. They can provide excellent protection against harsh weather conditions such as rain, snow, and strong winds. In addition, metal roof panels are lightweight and easy to install and handle during construction.

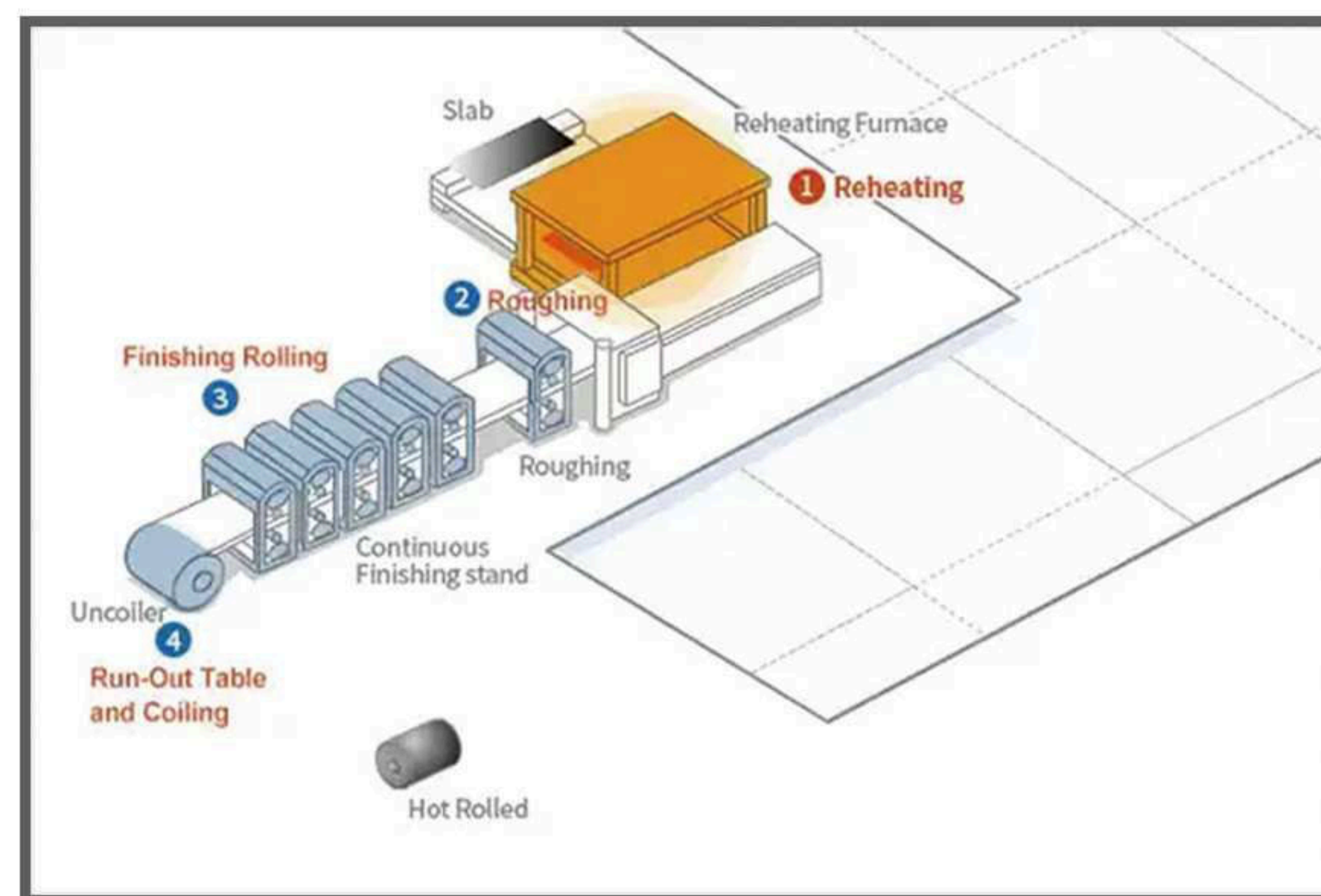


## ■ PRODUCT FORM



# MANUFACTURING PROCESS

## HOT ROLLED STEEL



1. **Reheating:** Hot rolled coils pass through a pickling line, where scale breaker machines and hydrochloric acid solutions are used to remove any surface scale and/or oxide film that which causes surface flaws during the final stage of cold rolled steel processing.

2. **Roughing:** In this process, slabs whose surface scale share has been removed are made into rolled materials with the proper shape, thickness, and width. In the entry and exit area of the roughing mill, an edger rolls the strip in the width direction using an Automatic Width Control (AWC) system.

3. **Finishing Rolling:** The purpose of finishing rolling is to adjust the thickness and width of a coil to the specified dimensions and to produce a smooth surface and shape at the desired finishing temperature appropriate for its intended use.

Our up-to-date equipment, including Work Roll Shift Mills, Pair Cross Mills and On-line Roll Grinders (ORG), enhances plant productivity and improves the quality of the finished coils by controlling the crown shape.

4. **Run-Out Table and Coiling:** Steel strips, after the finishing mill, are passed to the run-out table where they are coiled. While being rolled on the table, the strips are sprayed with water to cool them to the proper temperature for coiling.

## COLD ROLLED STEEL

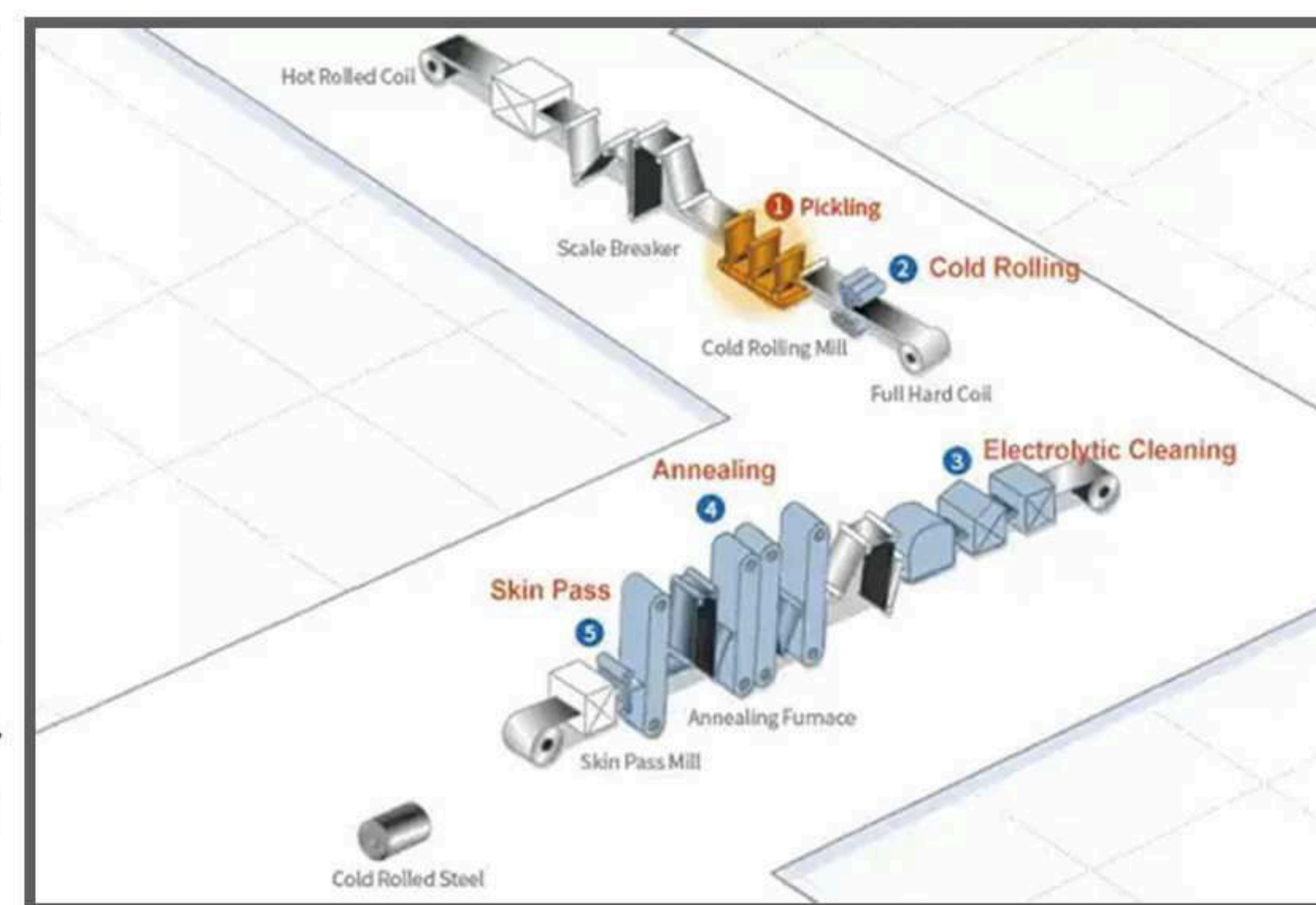
1. **Pickling:** Hot rolled coils pass through a pickling line, where scale breaker machines and hydrochloric acid solutions are used to remove any surface scale and/or oxide film that which causes surface flaws during the final stage of cold rolled steel processing.

2. **Cold Rolling:** Pickled coils are cold rolled in tandem mills to a specified thickness, typically 40 to 90%, of original material dimensions. Fully automated shape adjustment is ensured through state of the art process machinery.

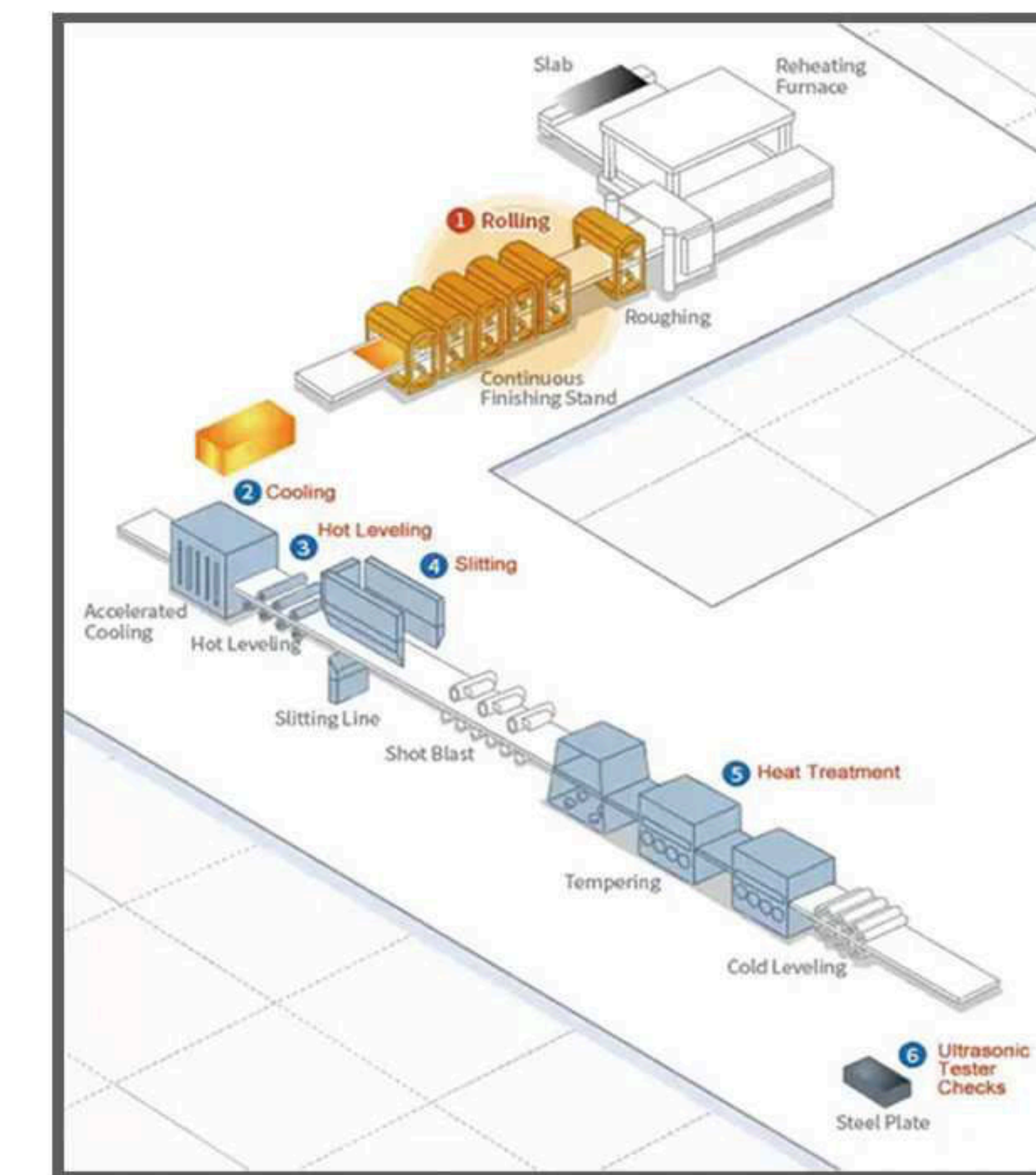
3. **Electrolytic Cleaning:** The purpose of electrolytic cleaning is to remove lubricant oil and contaminants on the cold rolled steel prior to the annealing process.

4. **Annealing:** This is a highly productive manufacturing method whereby steel products with extra deep drawing qualities and high tensile strength can be produced. Two annealing methods are commonly used: batch annealing and continuous annealing.

5. **Skin Pass:** This final rolling process is performed in order to remove minor surface defects such as stretch marks and to produce a smooth, lustrous surface. Skin Pass results in a further thickness reduction of about 1%.



## STAINLESS STEEL



1. **Steel Making:** Steelmaking has the greatest impact on the quality and cost of steel products. We have state-of-the-art AOD, VOD and continuous casting facilities.

2. **Hot Rolling:** Slabs made in the steelmaking plant are rolled into black coils of highly refined thickness and shape before being made into white coils to the needs of customers through heat treatment, pickling and finishing in the annealing and pickling plant. White coils so produced are used for cold rolling, pipes and sheets.

3. **Plates:** Slabs produced at the steelmaking plant undergo rolling, heat-treatment and a pickling process, which are then cut into sizes as ordered and delivered to the customer. Thick plates are used by the heavy chemical industries that require corrosion resistance, such as petrochemicals, power plant facilities, paper manufacturing and special shipbuilding.

4. **Cold Rolling:** JIUKUANG is equipped with 20 high cluster mills, bright annealing line, TLL (Tension Leveling Line), AFC (Automatic Flatness Control), AGC (Automatic Gauge Control), which enable the production of cold rolled products of 0.1-3.0mm in thickness and up to 1580mm in width in various shapes and surface treatment.

## STEEL PLATE

1. **Rolling:** The 4-high reversible finishing mill with the maximum load of 7000 tons minimizes internal defects even inly thick plates. Automatic gauge control and shape control systems can reduce not only the thickness deviation of plates but also improve the flatness.

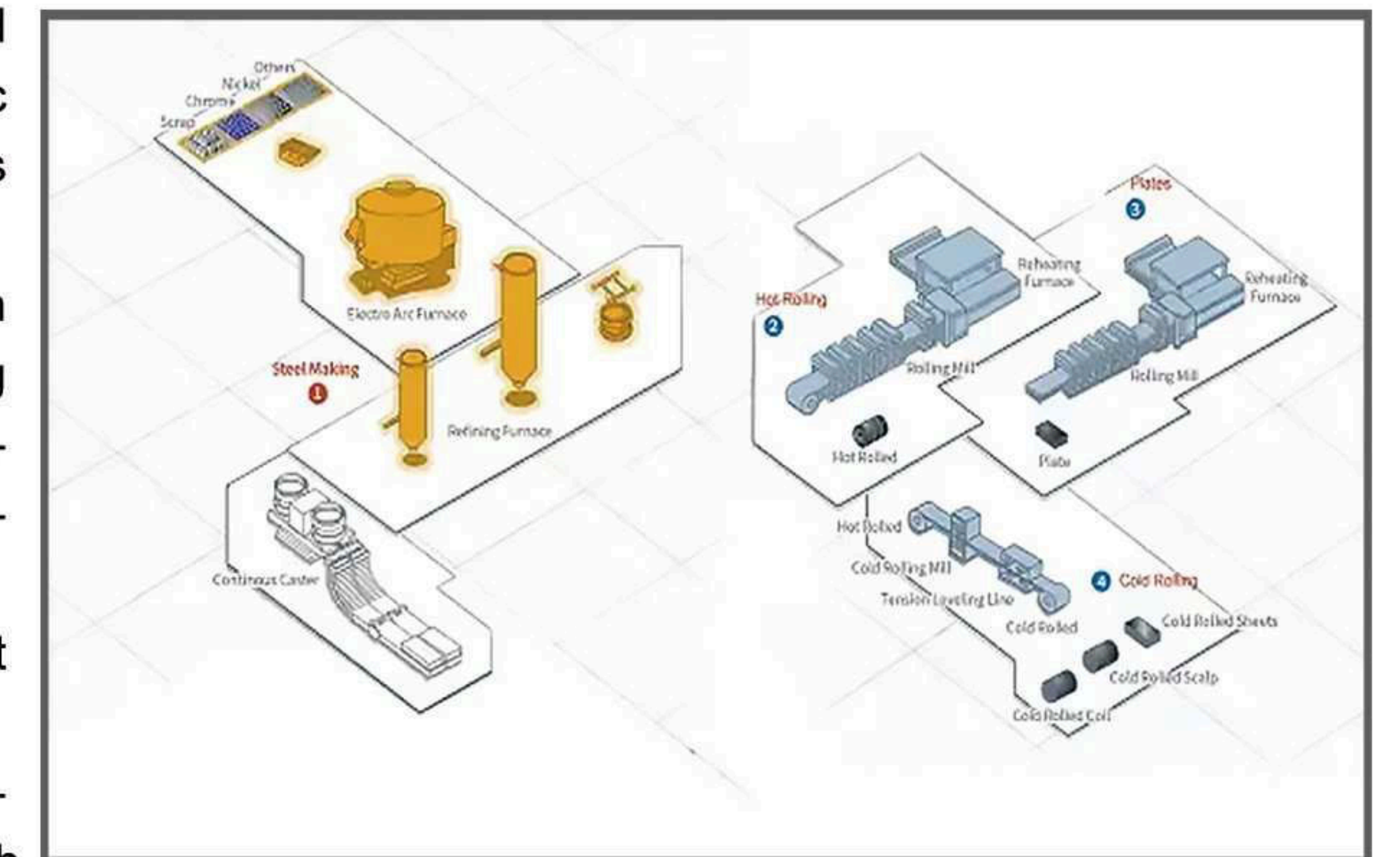
2. **Cooling:** The cooling system enables the production of high strength steel without heat treatment through rolling and accelerated cooling. Using the mist cooling method with suction type, the system has a high cooling capacity and is able to maintain a uniform temperature gradient in the width-wise direction. This leads to a reduction of plate quality deviation.

3. **Hot Leveling:** The hot leveler is used to make superior quality flat plates by eliminating residual stress left on rolled plates.

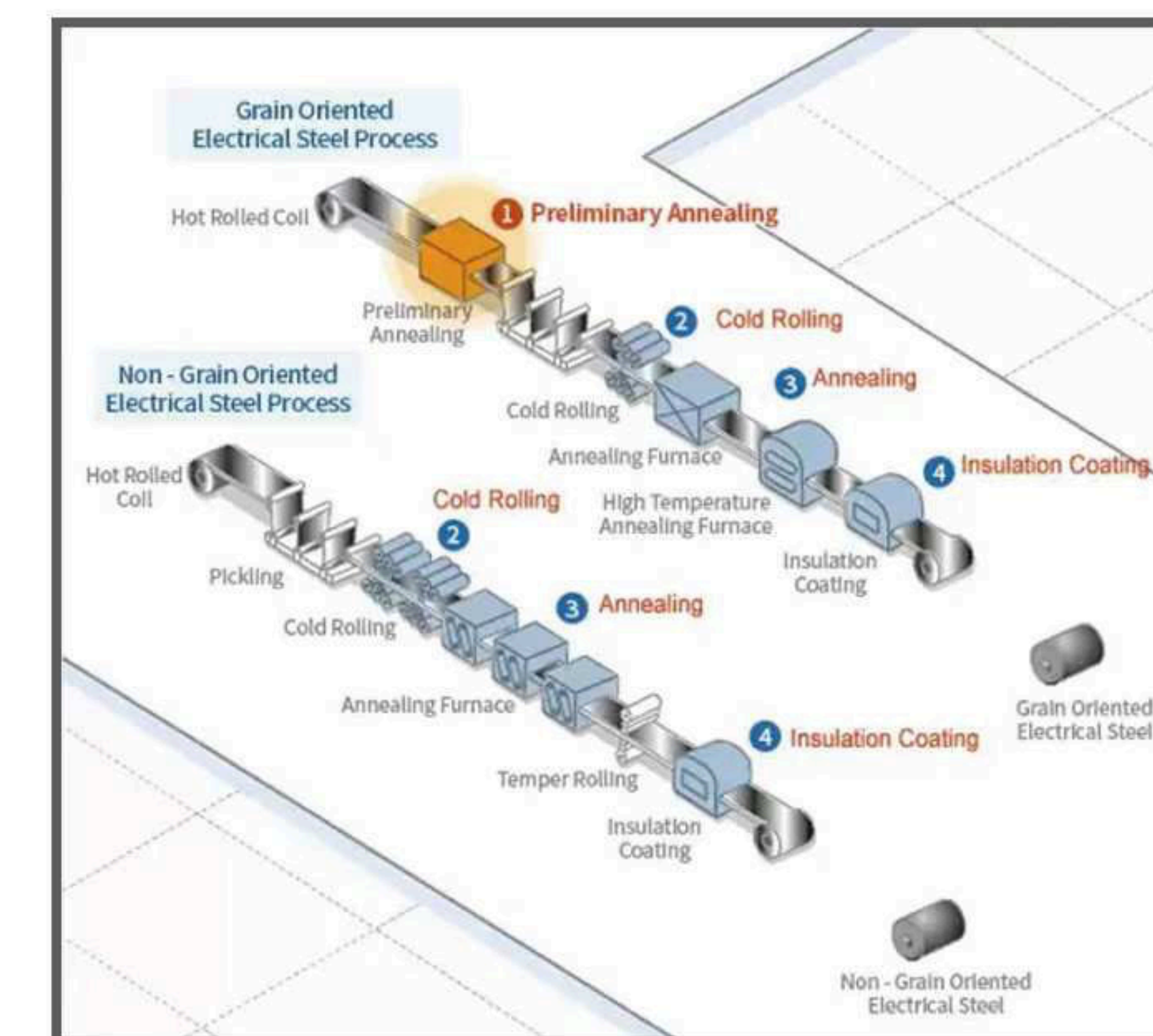
4. **Slitting:** After passing through the cooler, the plates undergo a dimensional accuracy inspection and then cut into appropriate width and length according to plate grade and thickness using either mechanical shearing machine or flame planner. To obtain a higher degree of dimensional accuracy in products, production conditions are determined by such factors as the air knife gap and the nozzle size of the gas torch.

5. **Heat Treatment:** To attain the plate structure demanded by customers, plates undergo heat treatment after having the scale removed by shot blasters. The heat treating facilities are of a non-oxidizing radiation tube type, which produces scale-free heat-treated plates.

6. **Ultrasonic Tester Checks:** The ultrasonic tester checks for blow holes, pipes, and laminations and other internal defects. This test is performed to guarantee the internal quality of plates demanded by customers.



## ELECTRICAL STEEL



1. **Preliminary Annealing:** During the preliminary annealing process, a scale which may have formed on the hot rolled steel is removed as delayed passing through scale breaker and a hydrochloric acid bath. This initial heat treatment process improves the cold rolling properties of steel as well as its magnetic properties.

2. **Cold Rolling:** In order to obtain specific thickness and material properties, a reduction ratio of 40-90% is applied normally. Rolling and edge trimming machines are automatically controlled to obtain uniform thickness and width.

3. **Annealing:** Annealing is a process in which cold rolled structures are converted to a recrystallized structure through heat treatment. For grain oriented electrical steel, two different annealing methods are available: decarbonization annealing and high-temperature annealing. Decarbonization annealing removes excess carbon from the steel and applies a MgO coating. High-temperature annealing produces secondary recrystallized structures having superior magnetic properties.

4. **Insulation Coating:** In this process, insulation coating is applied by a continuous coater roll in order to minimize eddy current losses, which are proportional to the sheet thickness. A series of coaters are used to apply insulation coating liquid to the top and bottom of a plate. Grain oriented electrical steel has two layers of coating, a base coating of dark brown Forsterite (Mg<sub>2</sub>SiO<sub>4</sub>) as the main ingredient and a transparent insulating coating containing phosphates. For non-oriented electrical steel, various coating methods with various thicknesses and ingredients are used depending on end usage and specific user's requirements.

## ■ GALVANIZED STEEL

1. **Pre-Treatment Process:** Some rolling oil and other contaminants remain on the surface of cold rolled steel sheets following processing. These are removed by passing the electrically charged sheet through an alkaline solution which induces an electrochemical reaction.

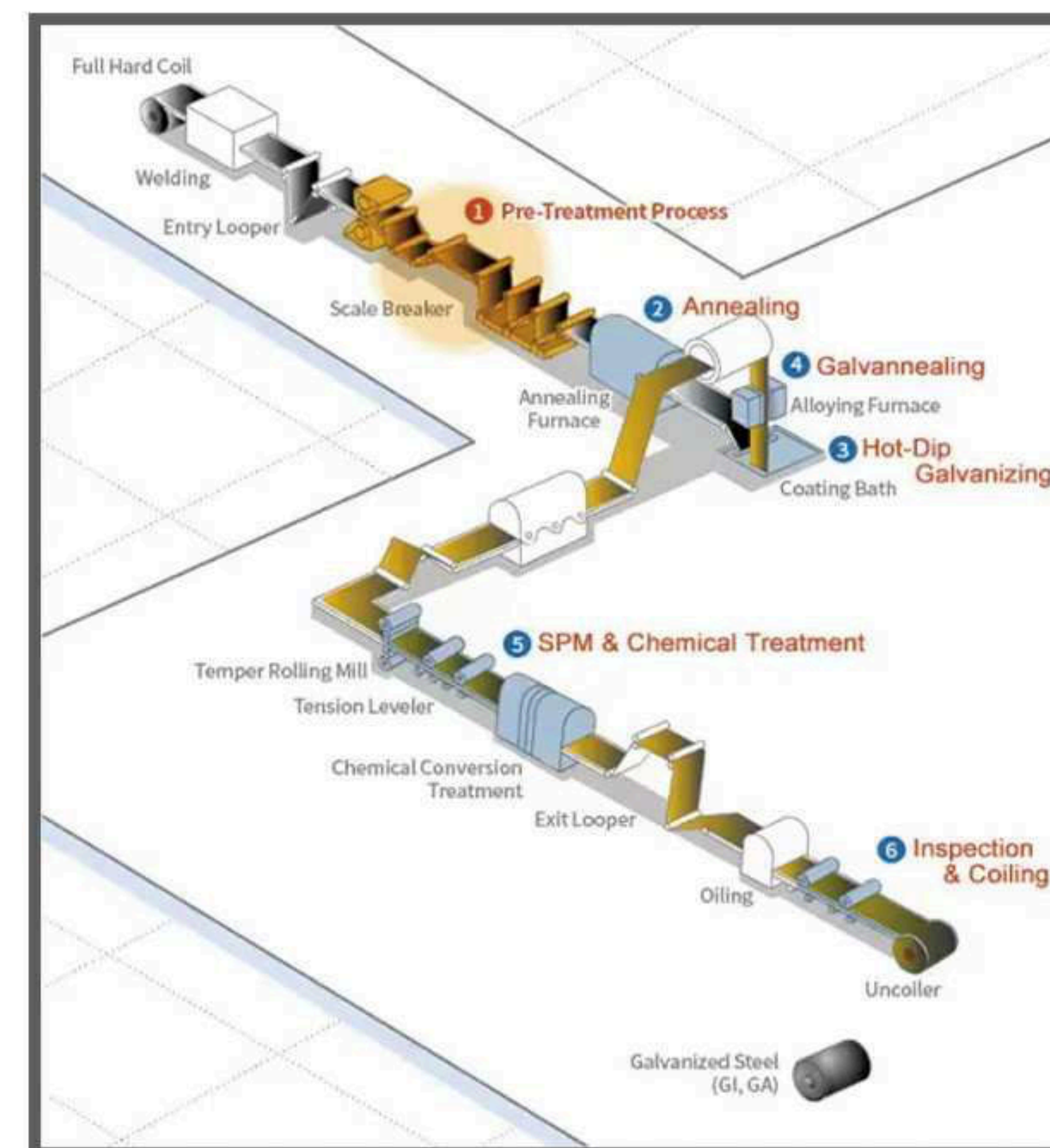
2. **Annealing:** The material properties of the pre-treated steel sheet can be altered and improved through recrystallization during the annealing process.

3. **Hot-Dip Galvanizing:** After passing through the annealing furnace, steel sheets are dipped into a zinc pot where molten Zn is coated onto the surface. The desired coating weight is achieved by removing excess zinc before solidification with high-pressure air from an air knife.

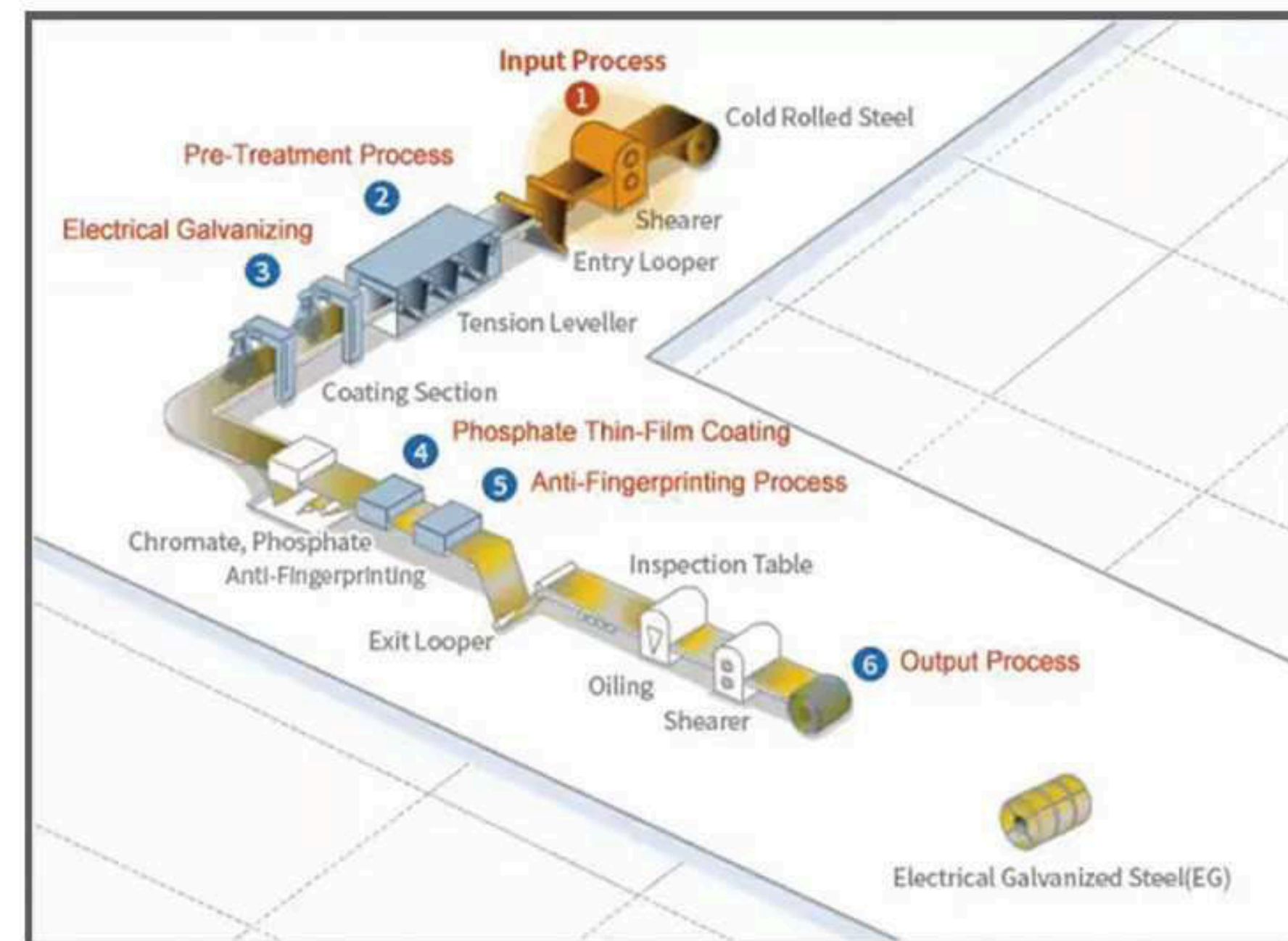
4. **Galvannealing:** The surface of a steel sheet, after the air knife, can be coated with a zinc compound prior to reheating in an annealing process. Zn atoms diffuse into the Fe to create a Zn-Fe series alloy.

5. **SPM & Chemical Treatment:** In order to achieve a flat surface and an elegant finish, the steel sheet is processed with a skin pass mill. In order to prevent the white rust, which often forms on the surface of activated zinc, and to improve corrosion resistance, the surface is coated with a Cr-free resin.

6. **Inspection & Coiling:** In order to achieve a flat surface and an elegant finish, the steel sheet is processed with a skin pass mill. In order to prevent the white rust, which often forms on the surface of activated zinc, and to improve corrosion resistance, the surface is coated with a Cr-free resin.



## ■ ELECTRICAL GALVANIZED STEEL



1. **Input Process:** Equipment at the entry point of the electrogalvanizing line consists of a pay-off reel, a shearing M/C, a welding M/C, a looper and a tension leveler. The pay-off reel transports stacked or cold rolled steel materials to the shearing machine which cuts and connects them in preparation for welding. Then comes the welding.

2. **Pre-Treatment Process:** An electrolytic cleaning line consists of an electrolysis tank, an acid bath and a rinse tank to remove contaminants and oxide films from the surface of the steel before electroplating.

3. **Electrical Galvanizing:** The CAROSEL method, among other electric galvanizing, involves the plating of one side at a time by means of a conductor roll. This process produces two-sided, single-sided, differential-sided plated sheets. There is also the horizontal type where two sides of a sheet are plated at the same time to produce a two-sided plated sheet.

4. **Phosphate Thin-Film Coating:** A phosphate thin-film is applied to the surface of the zinc layer through chemical or electrochemical reactions. The film is intended to provide temporary anti-corrosion protection and to generate a secure painting substrate.

5. **Anti-Fingerprinting Process:** An organic, inorganic or organic-inorganic hybrid film is applied to the surface of sheet steel in order to supplement its corrosion resistance and to enhance desirable properties such as resistance to fingerprint marks and workability.

6. **Output Process:** The exit point of the line includes an output looper, tension reel, and an automatic packaging line to protect the products after coil winding.

## ■ WIRE ROD

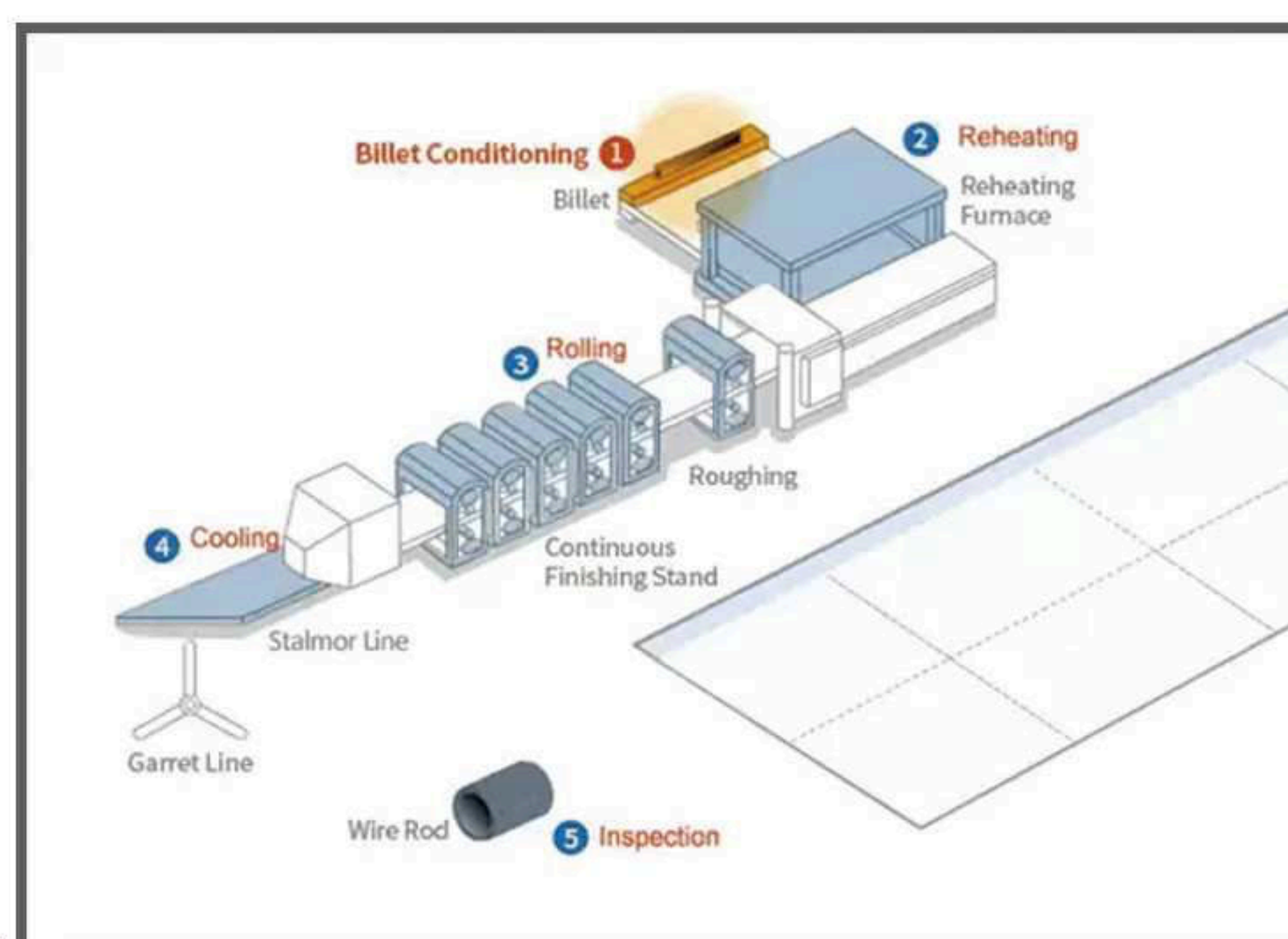
1. **Billet Conditioning:** This process is intended for checking the surface quality of billet and removing any defects. Shot blast is used to remove any scale from the surface. Magnet particle testing and visual inspection are also used to identify any defects which must be removed using a grinder. Ultrasonic testing and dimension and geometry checking are also applied as part of the internal quality assurance process.

2. **Reheating:** The temperature within the furnace and the duration of reheating depend on where the product will be used. To avoid decarburization, which can affect the surface quality of the product, a billet is pre-heated sufficiently at a low temperature before being rolled within the reheating furnace. For this purpose, the fuel and air ratio are strictly controlled.

3. **Rolling:** The temperature, draft and speed of deformation with which the product is rolled are controlled to meet customer requirements for material features. Further measures to ensure the surface quality include the adjustment of roll roughness and gap, detection of any cracks and dimension correction.

4. **Cooling:** Coiling temperature at the laying head, the air flow and movement speed of the blower on the cooling bed and the cooling speed of the insulation cover are controlled to ensure that the product has the features required for each application. High carbon steel Wire rods are subject to fast cooling to achieve the microstructure required for successful drawing while low carbon steel is subject to slow cooling to ensure that the product provides the softness required for the customer to eliminate an annealing process.

5. **Inspection:** Samples are taken from the front and rear edges of the product after rolling and cooling for testing to identify any defects in the dimension or surface or material integrity. Packaging and tagging are also inspected according to customer requirements prior to shipping.



# Why Choose Us ?

For the steel industry, customer care is not just quality control, on-time delivery and offering good price, but also adding value through the services we provide. We work with customers to continuously improve steel quality to help customers obtain more efficient and effective manufacturing processes.



01

### Quality Assurance

We implement strict quality control procedures to ensure consistent material quality and to meet, or exceed customer



02

### Fast Delivery

We have 10+ warehouses with ready stock all year round to ensure that high-quality products are delivered to customers on time.



03

### One-stop Service

Besides inventory, we have also developed a high-quality supply chain to provide customers with the products they



04

### Worry free after sale

We have a strict audit procedure and after-sales system for all orders to ensure that every order is satisfactory to customers.

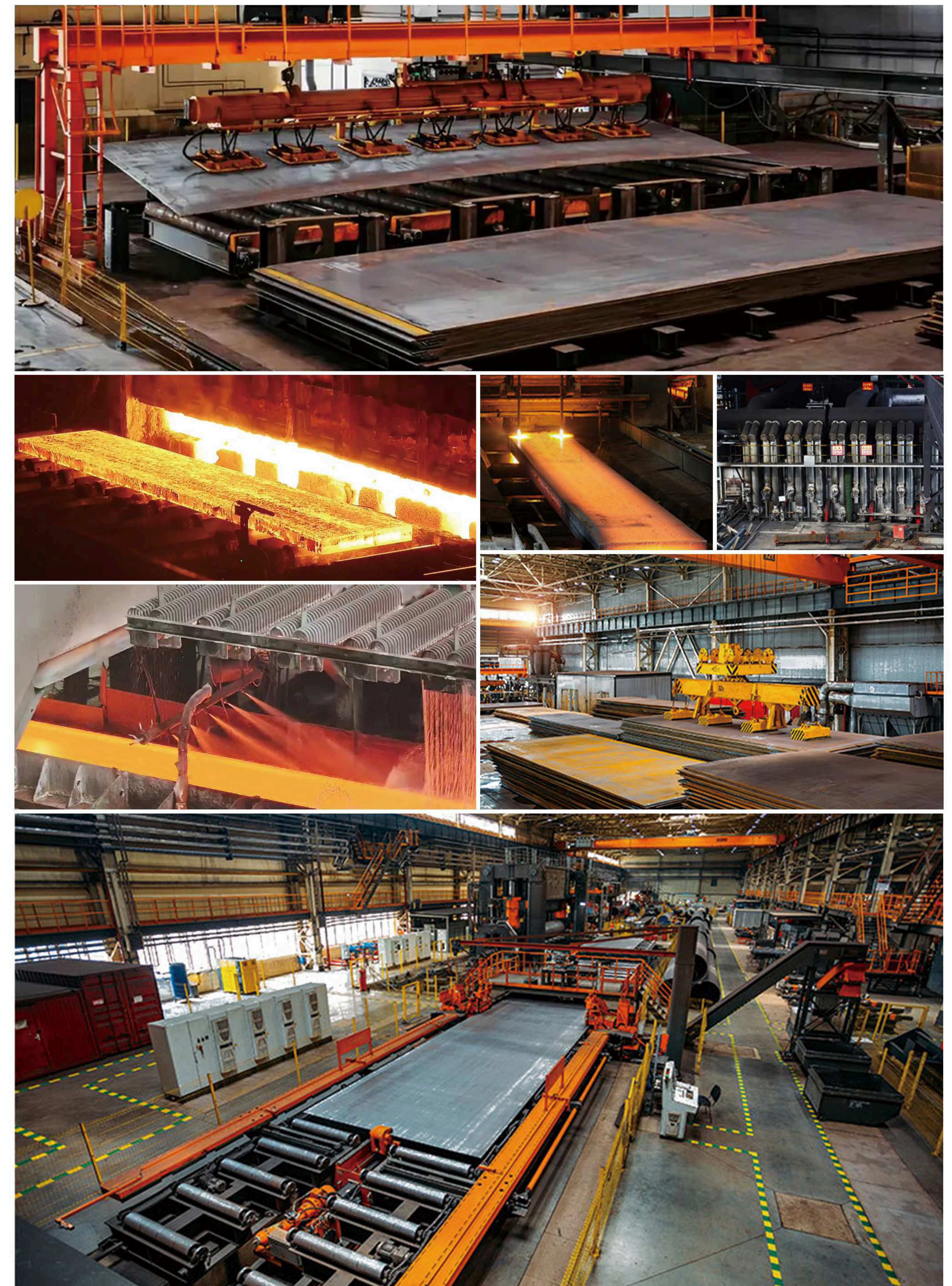


05

### Professional Team

We have a professional pre-sales and after-sales team with 10+ years of experience in the steel industry to provide customers with professional, efficient and high-quality

# FACTORY SCENERY



# VISITING CUSTOMERS





# COOPERATION GUIDE

- [Palletizing](#)
- [Trade Terms](#)
- [Privacy Policy](#)

# Palletizing

Our delivery standards provide rules and guidelines for palletizing delivery. When placing an order, please make sure to specify whether the materials should comply with the special agreement.

\* The purpose of this standard is to stack materials in a way that avoids handling damage and creates cost-effective and manageable volumes.

## ■ General pallet rules

- The maximum pallet weight is 12 tonnes.
- Thick and thin plates are never loaded on the same pallet, when order from stock.
- Painted and unpainted plates are never loaded on the same pallet.
- The widest plate is always at the bottom on the pallet.
- Graduated width loading (widest plate on the pallet, gradually diminishing to the narrowest at the top) is employed for plate thicknesses <30.1 mm.
- Random length loading(plates of different lengths are loaded in random order) is employed.
- Some thin plate may be strapped.

## ■ Options

- Tie with steel straps around the pallets and stacks. The maximum plate length is 6099 millimeters.
- Stack weights as agreed.
- Pallet weights as agreed.
- Special colour coding.
- Delivery codes outside the standard.
- Other requirements on dimensional separation.

## ■ Optional marking

- On the top plate on a pallet or stack. Up to 3 lines with 21 characters (manuell marking)\* stack, up to 3 lines.
- Edge label attached on the thickness surface of the short side. Available in three variants with different information about the plate. Edge label possible above 8 mm thickness

\* Concepts

Pallet: A platform loaded with packages. The pallets are separated with timber spacers measuring 63 x 90 mm.

Stack: A partial load on a pallet. Separated from other stacks by timber spacers measuring 32 x32 mm.

Pallet label: A label attached to the top plate on a pallet containing the printed pallet number, legible text, bar code, painted colour code, quantity, weight, and the identity of the top plate.

Color: Color code the short/long edges of the plate for shipping purposes.

Short: Plate <6100 mm long.



## Trade Term

FOB, CIF, CFR, EXW, DAP

### ■ FOB - Free on Board

The seller delivers the goods to the ship designated by the buyer at the designated freight port, or obtains the goods that have been delivered in this way. The risk of loss or damage to the goods passes while the goods are on board the vessel and the buyer is responsible for all costs incurred from that time on.

### ■ CIF- Cost, Insurance and Freight

Basically the same as CFR, but in addition to the requirements of CFR, the seller must also maintain minimum insurance against the buyer's risk of loss of or damage to the goods during transportation.

### ■ CFR - Cost and Freight

The seller delivers the goods on board the ship. The risk of loss or damage to the cargo is transferred while the cargo is on board the ship. The seller must enter into a contract and be responsible for transporting the goods to the designated port of destination and paying the necessary costs and freight.

### ■ EXW-Ex Works(Specified Delivery Location )

Often used when an initial quotation is made for the sale of goods, excluding any fees, EXW means that the seller supplies the goods at his or her premises or at another designated location (factory, warehouse, etc.). The seller does not need to load the goods into any collection vehicles and does not need to clear customs for export goods.

### ■ DAP-Delivery at Destination(Specified Destination)

Delivery occurs when the goods are delivered to the destination by some means of transportation and prepared for unloading, and are disposed of at the buyer's discretion. Where the term DAP is adopted, the seller needs to manage all risks introduced into the design of the goods.

Privacy Policy

# Privacy Policy

When you use our services, you are trusting us with your information. We understand this is a big responsibility and work hard to protect your information and put you in control.

We may collect or record basic personal information (e.g., name, e-mail address, mailing address, phone number) which you voluntarily provide through forms on our Site, through electronic mail you send to us, or through other means of communication between you and us.

We also collect, use, and disclose identifiable information about individual contacts for our customers ("Business Contact Information") in the ordinary course of our business for managing and maintaining customer relationships. In particular, we may obtain the following types of Business Contact Information: name, address, invoice information including bank account information, and order information. Unless otherwise specified or prohibited, we may share information with affiliates, business partners, service providers, subsidiaries or contractors who are required to provide you with services which you have requested from us.

We may collect your contact information to communicate with you about our cooperation and transactions, or to understand your needs to give you a professional guide, including product performance and practical applications, market consumption levels and Products Recommended. However, we will not pass the specific details of our cooperation experience to third parties, and we will not let your competitors inquire about specific information. We will try our best to protect the privacy and security of our transactions and the specific content of the transactions.

The security of your personal information is important to us. We follow generally accepted industry standards to protect the personal information submitted to us, both during transmission and once we receive it.

We use reasonable measures to safeguard personally identifiable information, which measures



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