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· WeChat ·



SHANDONG ZHONGHAO METAL MATERIALS CO.,LTD

COMPANY CATALOG

www.zhonghaoiron.com



Shandong Zhonghao Metal Materials Co., Ltd. always pays attention to the integration of resources and adheres to the concept of win-win cooperation. Based on honesty and relying on resource advantages, we guarantee the most reliable quality and the most favorable price. Looking forward to be your best partner!



Sincere
service

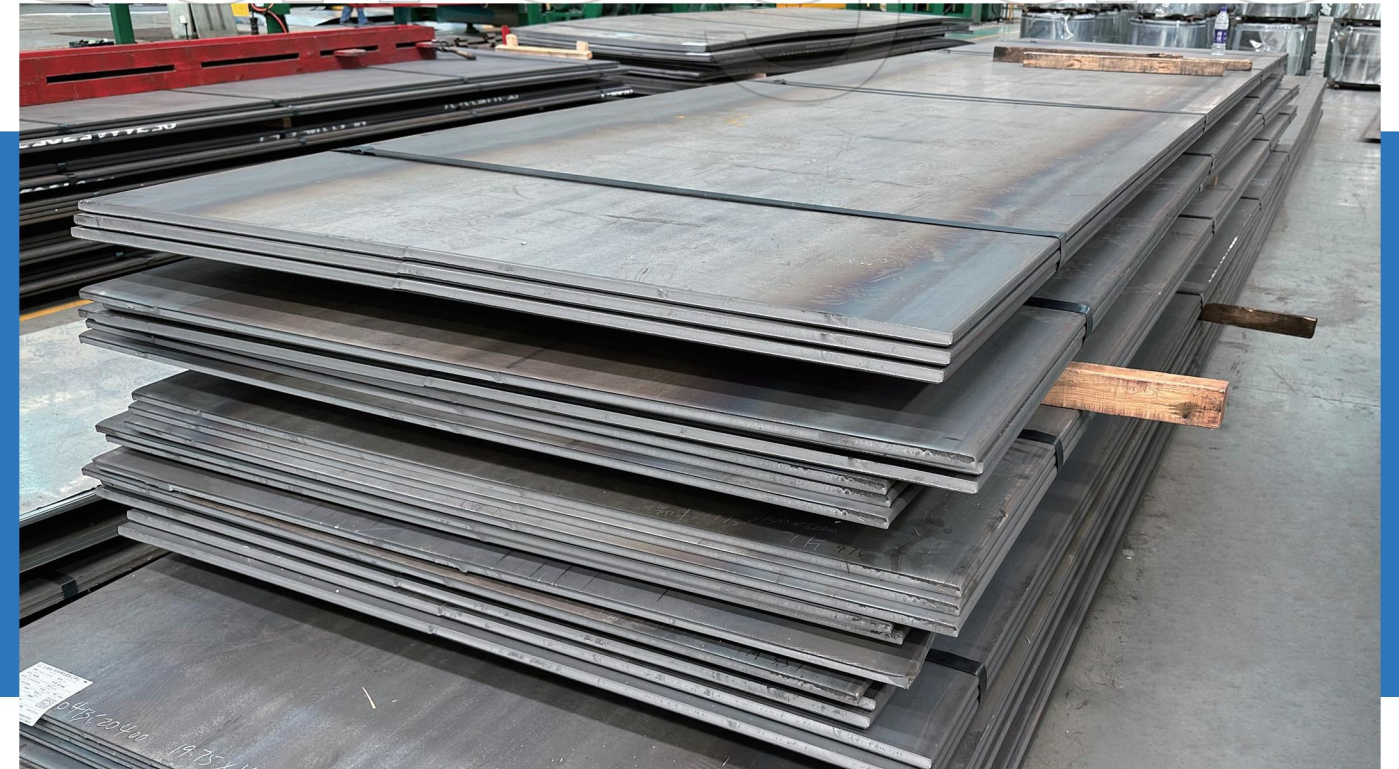
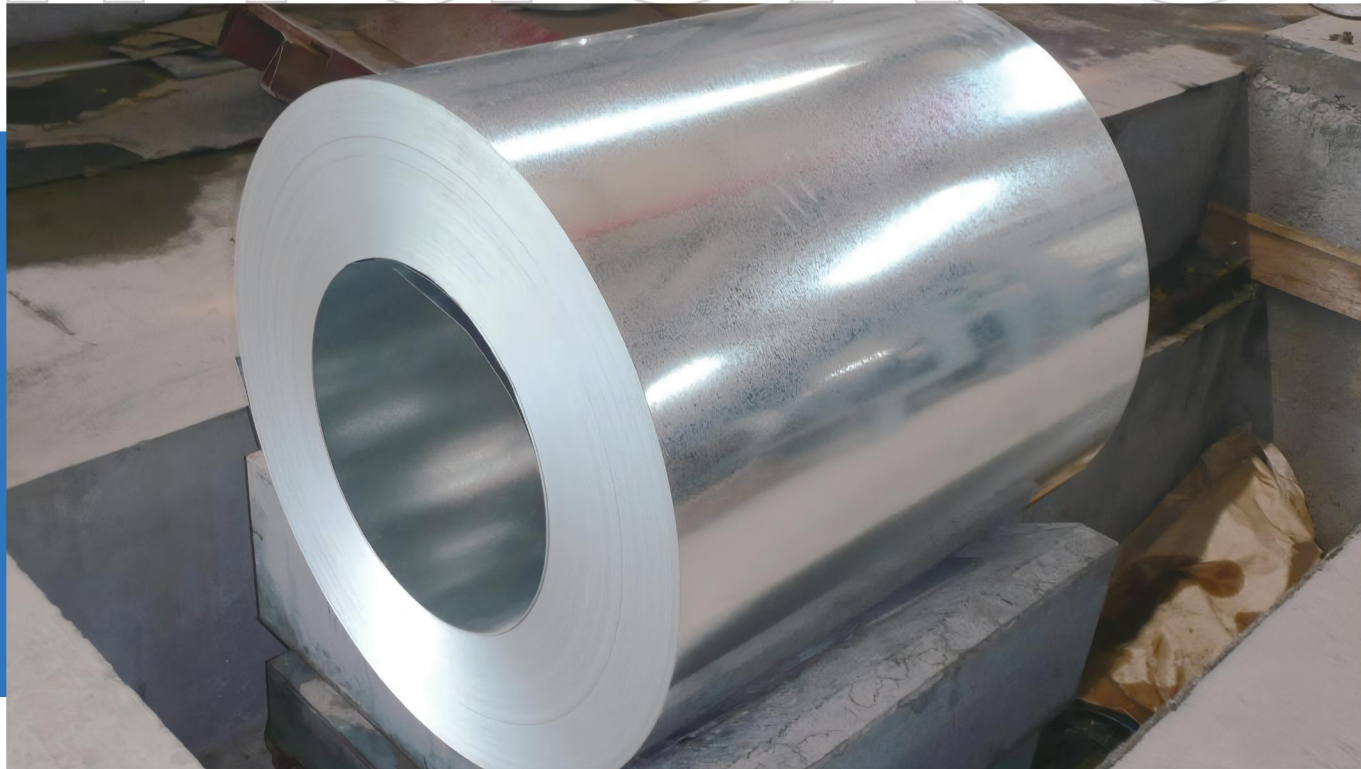


Quality
product



Rich
experience

Index catalogue



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Part one

ABOUT US .

You can get an in-depth understanding of our company through this part, and feel free to ask me if there is anything else you want to know.

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Here is the detailed information of our products. If you have any questions about the products, you can read this part. If you have any questions that are not covered in it, please feel free to consult me.

COMPANY PROFILE

Sincere
serviceQuality
productRich
experience

Shandong Zhonghao Metal Materials Co., Ltd. is affiliated to Jinan Zunkai Group. Jinan Zunkai Group was established in 2002. The group has 6 branches. The company has strong strength, annual sales of nearly 1 billion, and steel sales of more than 300,000 tons.

The company is located in Jinan City, Shandong Province. The main products are PPGI, galvanized steel, steel plate, round bar, steel pipe, Stainless steel product, angle bar, steel pile, H beam, I beam, angle, Channel flat steel, etc.

With its excellent product quality, exquisite construction technology and considerate after-sales service, it has won wide acclaim and praise from customers. Become a long-term partner of large-scale construction teams in many countries.

company has leading research and development capabilities and technical advantages.



PEOPLE-ORIENTED, ANCHORING FIRST-CLASS

Since its establishment, the company has adhered to the concept of people-oriented development, respect each employee's personal development value, and cast a solid core of the enterprise with action.

With advanced testing methods and perfect quality assurance system, it has passed ISO9001 quality management system certification, environmental management system certification, occupational health and safety management system certification, and China Energy Conservation Product Certification. The main markets are North America, South America, Europe, East Asia, Africa.

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PRODUCTS CENTER



Galvanized Steel Coil



Carbon Steel Coil



Seamless Pipe



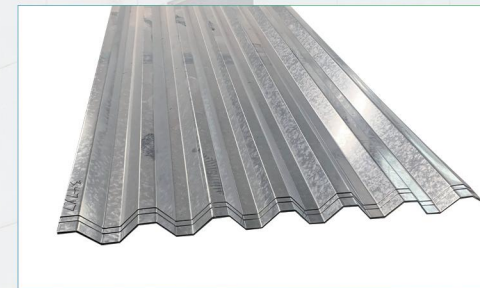
Aluminium Alloy Profile



Galvalume Coil



Cold Rolled Coil



Galvanized Floor Bearing Plate



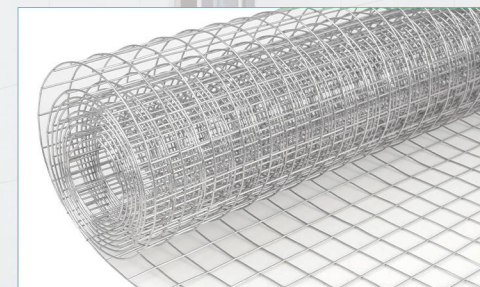
Steel Section



Aluminum Coil



Stainless Steel Coil



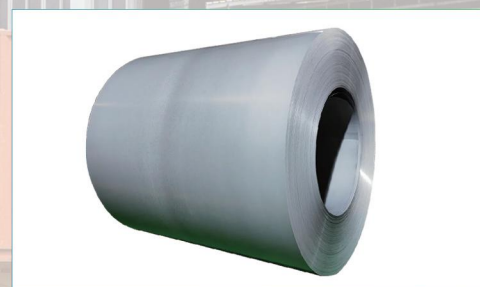
Galvanized Wire Mesh



Galvanized Barbed Rope



PPGI



Cold-Rolled Grain-Oriented
Electrical Steel Coil



Galvanized Iron Wire



Copper Coil

PRODUCT SPECIFICATION

Galvanized Steel Coil

Introduction to galvanizing

Galvanized steels are to prevent the surface of the steel sheet from corrosion and prolong its service life. A layer of metal zinc is coated on the surface of the steel sheet. This galvanized steel is called galvanized steel sheet or coil.

Galvanizing is an economical and effective rust prevention method that is often used, and about half of the world's zinc production is used in this process. The coating of galvanized steel sheet has strong toughness, and the galvanized layer forms a special metallurgical structure, which can withstand mechanical damage during transportation and use. The surface of galvanized steel sheet has strong anti-oxidation ability, which can strengthen the anti-corrosion penetration ability of parts.



Packing and transportation

The standard seaworthy package includes waterproof kraft paper and plastic film inside and GI sheets outside. Then it is bound with steel strips. Below are some pictures for your reference.



Product application

Galvanized steel coil products are mainly used in construction, light industry, automobile, agriculture, animal husbandry, fishery and commercial industries.

The construction industry is mainly used for the manufacture of anti-corrosion industrial and civil building roof panels, roof grids, etc.

The light industry uses it to manufacture household appliance shell, civil chimney, kitchen utensils, etc., and the automobile industry is mainly used to manufacture corrosion resistant parts of cars.

Agriculture, animal husbandry and fishery are mainly used as food storage and transportation, meat and aquatic products frozen processing equipment; Commercial mainly used as material storage and transportation, packaging tools, etc.

Product specification

Galvanized Steel Coil 镀锌卷

Grade	DX51D+ZDX52D+ZDX53D+ZDX54D+ZS220GD+ZDX51D+Z/SGCC/A653/Automotive grade,etc
Spangle coating	Big Spangle,small Spangle,Spangle-free
Surface Treatment	Passivation(C),Oiling(O),Lacquer sealing(L),Phosphating(P),Untreated(U)
Package weight	2-6 ton per coil
Zinc Coating	30-275g/m ²
Thickness	0.2-4.0mm
Width	600-1250mm
Application	making pipes, cutting sheets, making small tools, making corrugated sheets, making container, making fences
Certificate	API, RoHS, SNI, BIS, PVOC, SABIS, JIS, GS, ISO9001

Manufacturing process

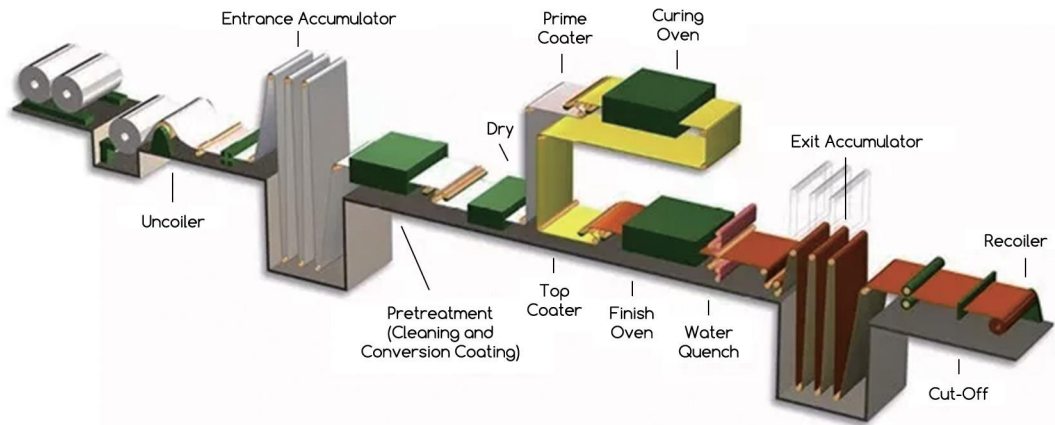
Galvanized steel is a carbon steel that has been coated with zinc. The most common method of zinc coating is the hot-dip process.

The hot-dip process consists of submerging the carbon steel into a molten zinc bath (approximately 680 degrees Fahrenheit). When the material is removed from the zinc bath and cooled a reaction to the oxygen in the air occurs. The reaction causes the zinc to become part of the steel (an iron-zinc alloy bond). The new surface finish appears to have a crystalline finish or spangled finish.

Continuous galvanizing applies the zinc coating to the surface of a continuous ribbon of steel (coil) as it passes through a zinc bath. The coil travels at speeds of approximately 600 feet per minute.

As the coil leaves the zinc bath it carries with it an extra layer of molten zinc. The extra zinc is removed with high pressure air (air knives) to create the desired thickness. The material is then allowed to cool and the spangled finish is formed.

Continuous galvanizing allows for more precise control of the thickness and is typically used for steel products that have not yet been fabricated. As the coating thickness increases, the risk of losing some coating during fabrication or forming also increases.



PRODUCT SPECIFICATION

Carbon Steel Coil



Introduction to Carbon Steel

Carbon steel is the most commonly produced metal today. It is manufactured in a variety of shapes and sizes and is used in most applications of any metal. It is defined as steel with carbon content ranging from 0.05 percent to 2.1 percent by weight. The term carbon steel includes many different grades/classifications, such as low carbon, high carbon, and alloy steels. In general, carbon steel has a higher carbon content, a lower melting point, and greater durability than stainless steel.

Coil - a finished steel product, such as sheet or strip, that has been rolled and then coiled or wound. Based on the experience gained over the years, steel coils are classified into cold rolled steel coils and hot rolled steel coils, or stainless steel coils, carbon coils and galvanized steel according to current products and international standards.



Hot Rolled Steel Coils

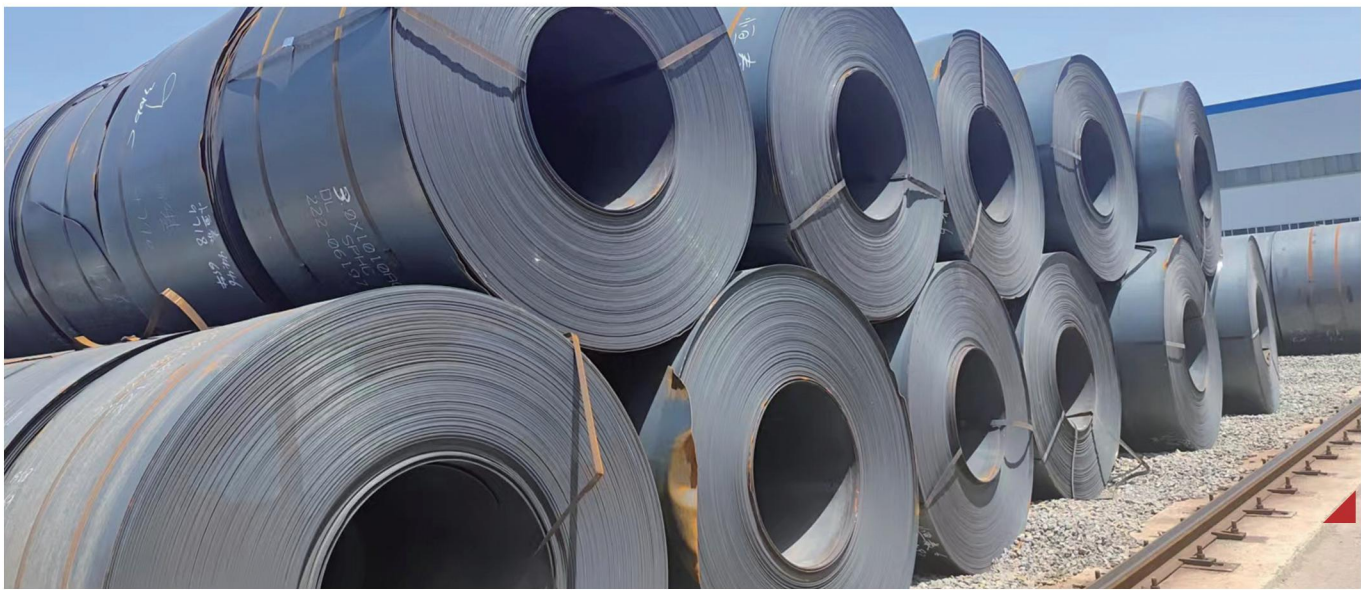
Hot rolled steel coils are made from semi-finished products that are rolled, annealed and reduced to a certain thickness and rolled into coils. Hot rolled steel is used to manufacture pipes, steel doors and tanks or further processed into cold rolled steel.

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's especially useful for countless outdoor and industrial applications.

They are mainly used in building roof, door, window, roller shutter door and automobile's vehicle shell, chassis, door, trunk lid, Oil tank, and fender, and also electric equipments, such as refrigerator base and shell and so on.

Hot Rold Rolling

Customers often ask us about the differences between hot rolled steel and cold rolled steel. There are some fundamental differences between these two types of metal. The differences between hot rolled steel and cold rolled steel relates to the way these metals are processed at the mill, and not the product specification or grade. Hot rolled steel involves rolling the steel at high temperatures, where cold rolled steel product is processed further in cold reduction mills where the material is cooled followed by annealing and/or tempers rolling.



Product specification

Carbon Steel Coil 碳钢卷

Thickness	Hot Rolled Thickness:2.75mm-100mm, as Your Request Cold Rolled Thickness:0.2mm-3mm, as Your Request
Width	1250-2500mm,or as Your Request (regular width 1000mm, 1250mm, 1500mm)
Coil ID	508mm or 610mm
Coil Weight	3 - 20ton or as Your Request
Standard	ASTM EN DIN GB ISO JIS BA ANSI
Steel Grade	Q235B Q355B SS400 S235JR S355JR A36 65Mn 08F
Technique	Hot rolled cold rolled as Your Request
Surface Treatment	Bare,Black,Oiled,Shot Blasted,Spray Paint,Coated,Galvanized,or as Your Request
Application	Applies to appliances construction, machinery manufacturing, container manufacturing, shipbuilding, bridges, etc.
Package	Standard Export packing(Plastic film in the first layer,second layer is Kraft paper. Third layer is galvanized sheet)
Remarks	Insurance per to Contract terms; MTC will be handed on with shipping documents; We accept the third party certification test.

PRODUCT SPECIFICATION

Galvalume Coil

About Galvalume Coil

Galvalume is a coating consisting of zinc, aluminum and silicon that is used to protect a metal (primarily steel) from oxidation. It is similar to galvanizing in that it is a sacrificial metal coating which protects the base metal.

Galvalume is primarily used to protect iron-based alloys that are prone to rust. Galvalume-coated steel is better able to resist oxidation than plain carbon steel because the zinc and aluminum protect the underlying steel from the environment. The zinc also will more readily oxidize than the steel it contacts. This is similar to galvanized steel.

Galvalume is applied to a material using the hot-dipping process. Therefore, a Galvalume coating has similar thicknesses to that of hot-dipped galvanized material. The thickness for the hot-dipping process is around 1 mil thick. The thickness can range somewhat depending on the coating specification. If the coating thicknesses of a Galvalume-coated steel and a galvanized steel are equal, the Galvalume steel will generally outlast the galvanized one, depending on the environment.

Galvalume coating is most commonly applied to carbon steel. However, most materials that can be galvanized can also be coated with Galvalume. Some additional metal types include:

- Cast Iron
- Ferritic Stainless Steel
- Martensitic Stainless Steel
- Low Alloy Steels



Coated steel sheet for a new age - economical, featuring excellent corrosion resistance, heat resistance, heat reflectance, and workability.

- Excellent long term durability
- Eco-friendly material
- Good heat resistance
- Good heat reflectance
- Smooth shiny surface

GALVALUME steel sheet can be worked and painted afterwards just like galvanized steel sheet.

Product specification

Galvalume Coil 镀铝锌卷

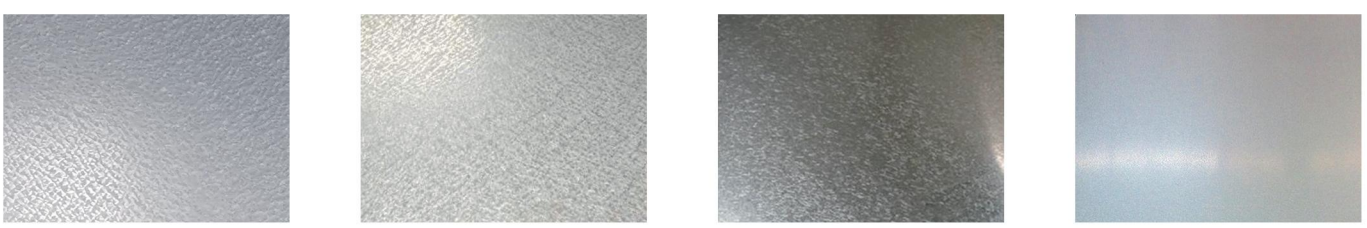
Standard	JIS G3302 / ASTM A653M / EN10327 / DIN17162
Grade	SGCC/DC51D/DX51D/DX52D/SGSS/SGCD1/SGCD2/SGCD3
Thickness	0.12~3.5 mm
Width	600~1250mm(usual size:914mm,1000mm,1200mm,1219mm,1250mm,1220mm)
Spangle	Regular spangle,Minimum spangle, Zero spangle, Big spangle
Zinc coating	30~275G/M2
Hardness	Soft hard(HRB60),medium hard(HRB60-85),full hard(HRB85-95)
Coil ID	508mm, 610mm
Coil weight	4-6 tons
Packing	Standard seaworthy export packing: waterproof paper+steel trippacked+wooden case seaworthy package
Delivery	Within 7-15days
Regular Order	25 tons or one container, for less quantity, to contact with us for details
Productivity	20000 tons per month

Galvanizing and Galvalume

The main difference between galvanizing and Galvalume is that galvalume is a combination of zinc, aluminum, and silicon, while galvanizing is 100% zinc. The makeup of the three elements in a Galvalume coating is just over 50% aluminum, just under 50% zinc, with trace amounts of silicon.

An advantage that Galvalume has over normal galvanized material is that it has enhanced protection abilities. Over time, Galvalume tends to perform better than galvanized steel, especially when exposed to water or other liquids that can speed up the oxidation process. Even after a few decades, Galvalume-coated steel will be less likely to rust than normal galvanized steel.

Galvalume is also considered more aesthetically pleasing than hot-dipped galvanized materials.



GALVALUME steel sheet exhibits the corrosion prevention of aluminum and the sacrificial protection and self-mending action of zinc in a good balance that prevents steel sheet from rusting for a long period of time. The layering of the GALVALUME steel sheet plating begins by solidifying aluminum and then crystallizing zinc .Over a long period of time, the zinc in the crystalline structure dissolves out and tiny cohesive oxides from the aluminum fill those spaces, creating what is known as the "self-mending action" of GALVALUME steel sheet.

REFLECTIVITY BENEFITS

GALVALUME has terrific reflectivity, of both heat and sunlight. Ideally, you would use bright white pre-painted panels for maximum reflectivity. It will efficiently reflect away the sunlight, reduce the heat transmitted to the building, and keep it much cooler inside. Your electricity bill should show substantial savings.

PRODUCT SPECIFICATION

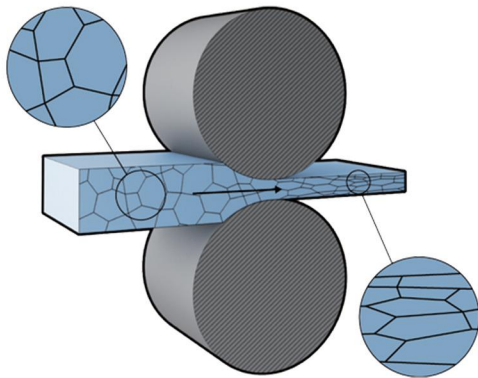
Cold Rolled Coil

What is Cold Rolled Coil

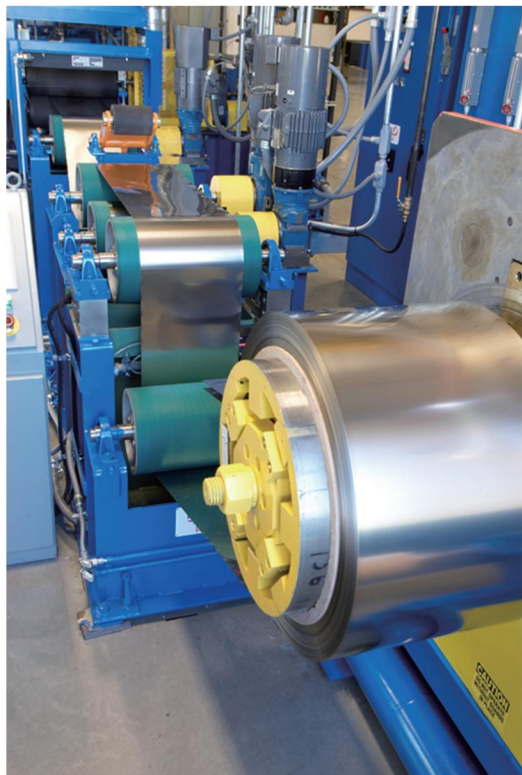
Cold rolled steel, sometimes abbreviated to CRS, is well-known for being an extremely ductile material, and is ideal for applications where precision is necessary. It is used in many applications, like household appliances, furniture, lockers, and filing cabinets. In construction applications, CRS is commonly used for building garages, steel sheds, and other industrial buildings.

In simple terms, cold rolling is the process of strengthening steel by changing its shape without using heat. Cold rolling, unlike hot rolling such as with hot rolled steel, can only occur when a metal is below its re-crystallization temperature. Where hot rolling is performed using high temperatures, cold rolling is performed at room temperature. Instead of heat, mechanical stress is used to change the structure of metal. Strain hardening can then increase the metal's strength by up to 20%, and can also improve a metal's surface finish.

During the cold rolling process, when the metal is put under mechanical stress, it causes a permanent change to the crystalline structure of the metal. This causes an increase in its strength and often improves corrosion resistance. Along with improving its surface finish, another advantage of cold rolling is better dimensional accuracy.



How Does a Cold Rolling Mill Work?



The process of cold rolling a metal alloy starts with either sheet metal or strip coil. These materials are placed into large rollers, which compress it down and squeeze it under high pressure just below its ultimate tensile strength. Depending on the amount of compression, different mechanical properties and hardness properties are achieved in the finished product. Through cold reduction, the thickness of the metal can be reduced by processing steel strip through a sequence of tandem rolling mill stands. The rolls on these stands are stacked vertically and powered by huge motors. The motors work hard to apply extreme compression to the metal.

These mills take coils of hot-rolled, pickled products and pass them through, making them thinner. Once the metal has passed through the rolls and has reached its desired thickness, it's done being rolled but it is not quite ready for use. At this point in the process, the metal is still highly cold-worked, and while it is high strength, it can be brittle. It needs to be annealed at a higher temperature to soften the steel so it is less difficult to work with. Once the metal has been annealed, it's easier to use it in many applications, because it's able to be bent and formed.

Another method of cold rolling uses a reversing mill, which passes the strip back and forth between mandrels. This reduces the thickness of the strip during each pass until the desired thickness is reached. Metal can be reduced by between 60 and 80 percent through cold rolling, and then can be used in the creation of consumer goods or for use in other industries.

Advantages of Cold Rolling

The biggest advantage of cold rolling is that it allows you to produce more with less energy, which reduces costs and increases efficiency. Additionally, this type of rolling can also increase the strength of materials without changing their size or shape, as well as improve surface finish and accuracy. Cold rolling also helps to minimize scrap material, as any material that is not suitable for cold rolling can be cut off before being rolled into shape. Finally, another advantage is that this process makes parts stronger than hot-rolled parts since the grain structure becomes denser during the process.

- Cold rolling is a process that can be used to strengthen and harden materials such as metals.
- The process of cold rolling involves passing the material through a pair of rollers at a temperature that is below the material's recrystallization temperature.
- Cold rolling can be used to reduce the thickness of a material, as well as to impart desired properties such as increased hardness or improved surface finish.
- One of the primary advantages of cold rolling is that it can be used to create materials with very high strength-to-weight ratios.
- Additionally, cold rolling can be used to create materials with enhanced wear resistance or improved corrosion resistance.



Product specification

Cold Rolled Coil 冷轧卷

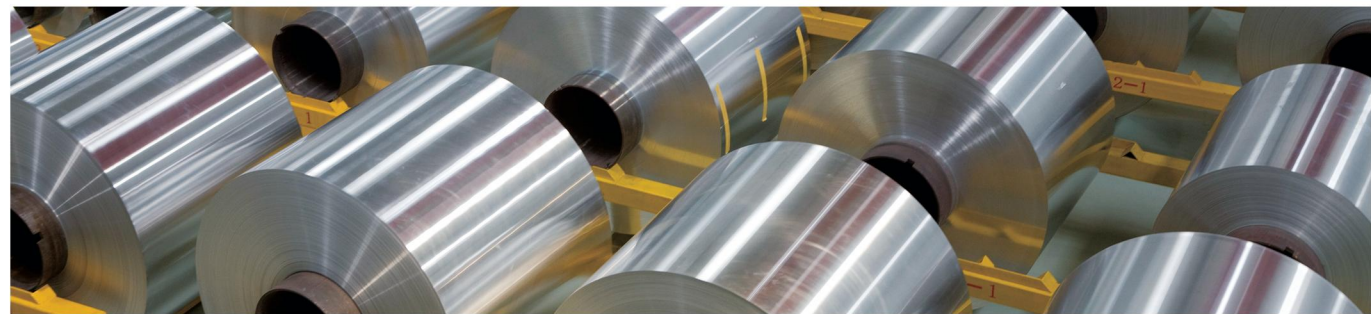
Grade	Q195,Q215,Q235,08AL,SPCC,SPCD,SPCE,SPCEN,ST12,ST13,ST14,ST15,ST16,DC01,DC03,DC04,DC05,DC06
Standard	ISO,JIS,ASTM,AS EN
Mechanical	Commercial / Drawing / Deep Drawing /Extra Deep Drawing/Structural quality
Surface treatment	Chromated and oiled, and ant-ifinger
Hardness	Softy, half hard ,hard quality
Thickness	0.12-6.0mm
Width	600-1500mm
Coil weight	3-8MT/Coil or as your request
MOQ	5MT
Packaging	Export standard, seaworthy
ID	508mm or 610mm

PRODUCT SPECIFICATION

Aluminum Coil

For the majority of manufacturing uses, pure aluminum is too soft. As a result, most aluminum coils are produced and delivered as an alloy. These alloys contain two or more elements, at least one of which is aluminum. The Aluminum Association oversees the four-digit number system to identify aluminum alloys for sheet products. Aluminium’s mechanical and other qualities can be adjusted to satisfy particular demands for strength, formability, and other properties when alloyed with other metals.

Aluminum coil, often known as "gauge," is offered in different lengths, widths, and thicknesses. The size of the components created and the production technique employed define the precise dimensions. In addition, many surface treatments are available, such as mill, matte, and brilliant. The choice will be based on the intended purpose and appearance of the finished component.



Also available in a variety of tempers is the aluminum coil. "F" temper, which has no set mechanical restrictions and no specific control over the thermal or work-hardening conditions has been applied, may be offered "as manufactured." This method is typically utilized for products in the middle of the production process because it is variable. Another choice pertains to wrought items strengthened by cold-rolling or cold-working, known as strain-hardened. The metal can also be annealed, which means it has to go through a controlled heating process to achieve the ideal balance of strength and formability.

Reasons for Choosing Aluminum

- **Weight** – The primary benefit of aluminum over most competing materials is its reduced weight. This reduced weight makes it perfect for industries like automotive and aerospace, where total product weight is a consideration. Additionally, shipping costs are lower as a result.
- **Workability** - Because aluminum is so flexible, it can be easily molded, stamped, or otherwise shaped. Its popularity is primarily influenced by its usability and adaptability. As a result, many production procedures favor aluminum, including drawing, roll forming, and stamping.
- **Value** – Aluminum is significantly less expensive than materials like copper, which enables producers to reduce material prices without compromising performance.
- **Recyclability** – Aluminum is easily recycled and can be reused repeatedly, minimizing its negative environmental effects.
- **Conductive Properties** – Aluminum coils' structure, which contains free electrons, makes them effective electrical conductors. In addition, the aluminum coil is an excellent conductor of heat because there is a constant flow of these electrons. Electrical grade aluminum has a conductivity of 62% of electrical grade copper as measured by equal cross-sectional area. But when the two materials are weighed the same, copper has a conductivity of 204%.

Uses of Aluminum Coil

There are numerous uses and industries for the coil. Many stamped and molded components in electronics, medicine, transportation, and other industries use it as their preferred material.

Transportation: It is extensively employed for transportation, as was already indicated. It is utilized in the auto industry to create anything from radiators and wheel hubs to engine parts and automobile doors. Using aluminum to substitute heavier metals can significantly reduce vehicle weight as the automotive industry works to do so. The term "lightweighting" represents optimizing all components to have the lowest weight.

Electronics: Aluminum is used in many industrial and consumer electronics because metal is an excellent conductor of electricity, retains heat, and is corrosion-resistant. Heat sinks, stamped components, shielding, and bigger components, like enclosures, can all be produced using it.

Consumer Goods and Hardware: Packaging for health and beauty products, tools and other hardware, building applications, jewelry, and a huge variety of other common objects all use aluminum parts made from aluminum coil.

Medical: Aluminum is widely used in the medical and dental fields for many products ranging from disposables to surgical equipment and sophisticated electronic devices.

Aerospace: Some aluminum alloys and tempers are perfect for aerospace applications due to their small weight, ability to resist corrosion, and potential for strength.



Product specification

Aluminium Coil 铝卷

Aluminium Alloy	Thickness(mm)	Width(mm)	Temper
A1050,A1060,A1070,A1100	0.2-8.0	20-2300	O,H12,H14,H16,H18,H22,H24,H26
A3003,A3004,A3105	0.2-8.0	20-2300	O,H12,H14,H16,H18,H22,H24,H26
A5052,A5005,A5083,A5754	0.2-8.0	20-2300	O,H12,H14,H34,H32,H36,H111,H112
A6061,A6082,A6063	0.2-8.0	20-2300	T4,T6,T651
A8011	0.2-8.0	20-2300	O,H12,H14,H16,H18,H22,H24,H26
Material process	CC AND DC		
Customerize size	Size can be produced as per clients requirement		
Surface	Mill finish ,Color coated(PVDF& PE),Stucco Embossed ,Bright Polish,Anodizing		
	Mirror,Brush,Perforated,Tread plate ,Corrugated etc		
Quality Standard	ASTM B209,EN573-1		
MOQ per size	1 ton		
Payment Terms	TT OR LC at sight		
Delivery time	Within 25 days after receipt the lc or deposit		
Material Quality	Tension levelled ,flat ,Free of defects like oil stain,Roll Marks,Waves,Dents		
	scratches etc ,A+++ quality, production process passed sgs and bv inspection		

PRODUCT SPECIFICATION

Stainless Steel Coil

About Stainless Steel Coil

Stainless steel is notable for its corrosion resistance, and it is widely used for food handling and cutlery among many other applications. Stainless steel does not readily corrode, rust or stain with water as ordinary steel does. However, it is not fully stain-proof in low-oxygen, or high-salinity environments. There are various grades and surface finishes of stainless steel to suit the environment the alloy must endure.

Stainless steel is used where both the properties of steel and corrosion resistance are required. Its resistance to corrosion and staining, low maintenance, and familiar lustre make it an ideal material for many applications.

Stainless steel coils are not just the types of stainless steel materials, but instead they are the collection of hundreds of grades and types of stainless steels.Stainless steel coils are most popular variety of stainless steel materials in the world.There are over 40 categories of stainless steel coil grades available making it easy to choose the right one for countless applications and products.



Special description

In order to ensure that the mechanical properties such as yield strength, tensile strength, elongation and hardness of various stainless steel coils meet the requirements, the stainless steel coils must undergo heat treatment such as annealing, solution treatment and aging treatment before delivery. The corrosion resistance of stainless steel coil mainly depends on its alloy composition (chromium, nickel, titanium, silicon, aluminum, etc.) and the internal structure of stainless steel coil. Chromium plays a major role. Chromium has high chemical stability, can form a passive film on the steel surface, isolate the metal from the outside, protect the steel plate from oxidation and increase the corrosion resistance of the steel plate. After the passivation film is destroyed, the corrosion resistance decreases.

Stainless Steel Coils Grades

Stainless steel coil can be divided into cold rolled stainless steel coil and hot rolled stainless steel coil according to different production processes.According to the materials, they can be divided into austenite, ferrite and super duplex.

Common use stainless steel coils grades are often represented by digital symbols.There are 200 series, 300 series, 400 series and duplex series.304, 304L, 316 and 316L stainless steel coils are the most popular and economical grades of stainless steels.

Stainless steel 304/304L coils and stainless steel 316/316L coils, along with duplex stainless steel coils offer good corrosion resistance to many chemical environments as well as marine and industrial exposures.

Stainless Steel Coils Surface Finish

The finish of the stainless steel coils can be No.1, 2D, 2B, BA, No.4 Hairline, Mirror, etc.

- 2B – Cold rolled, heat treated, pickled, skin passes. The surface brightness and flatness of 2B is better than 2D. then through a special surface treatment to improve its mechanical properties,2B could nearly satisfy comprehensive uses.
- 2D – Same as above but not skin passed (Matt/Dull Finish).
- BA – Bright annealed is a bright cold rolled highly reflective finish. Cold rolled, bright annealed and skin-passed, the product have excellent brightness and good reflexivity like mirror, kitchen apparatus,ornament etc.
- No.1 Finish : Hot rolled annealed and descaled. Produces a dull grey finish with little reflectivity.
- No.4 Finish : The most popular finish for kitchen appliances and work surfaces due to its smooth texture with little reflectivity.
- Mirror Finish: No.8 is a mirror-finished surface with the highest reflectivity without abrasive grains. The stainless steel deep processing industry also calls as 8K plates. Generally, BA materials are used as raw materials for mirror finishing only through grinding and polishing. After mirror finishing, the surface is artistic, so it is mostly used in building entrance decoration and interior decoration.

Product specification

Stainless Steel Coil 不锈钢卷

Standard	JIS,AISI,ASTM,DIN,EN,GB
Material	200 series: 201 202 ,etc 300 series: 301 304 304L 309 310 310s 316 316L 321, etc 400 series: 409 410 410S 420 430,etc
Surface	2B,BA(bright annealed) NO.1 O.2 NO.3 NO.4,8K HL(Hair Line) PVC
Technique	Hot Rolled / Cold Rolled
Thickness	Cold Rolled 0.4mm - 3.0mm;Hot Rolled 3.0-100mm or as required
Width	24-2000mm or as required
Length	1-6m or as required
Coil Weight	3.5-5 ton for normal standard or as customer's request
Application	construction field, ships building industry,petroleum & chemical industries, war and electricity industries, food processing and medical industry
Protection	1.Inter paper available 2.PvC protecting film available
Features	(1) High temperature strength and high temperature plasticity (2) Has excellent oxidation resistance and corrosion resistance(3) Has good tissue stability (4) Uniform chemical composition (5) Has good processability and welding performance(6) High dimensional accuracy and surface quality



Stainless Steel Coils Applications

Automotive trim and molding/Difficult-to-form exhaust-system components, tubular manifolds, mufflers/Exhaust manifold and other exhaust-system components, catalytic converter shells, clamps.Gutters and downspouts, roofing, siding.Cooking utensils, dishwashers, ovens, range hoods, refrigerators, skewers.Oil refinery equipment, oil burner and heater parts.Hot water tanks, residential furnaces.Heat Exchanger tubing.Farm animal pens/Animal shelters.restaurant equipment (hotels), food and dairy processing equipment

PRODUCT SPECIFICATION

Stainless Steel Pipe/Plate/Bar

Stainless Steel Pipe

Stainless steel tubing is corrosion- and chemical-resistant against many caustic chemicals, environmental contaminants, corrosive fluids, oils, and gases. Stainless steel is strong enough to withstand pressure and high temperatures and is one of the most versatile metal alloy materials used in manufacturing and fabrication. General purpose stainless steel tubing is available welded or seamless for a wide variety of sanitary applications. Flexible and rigid stainless steel vacuum tubing is available for high-vacuum applications.

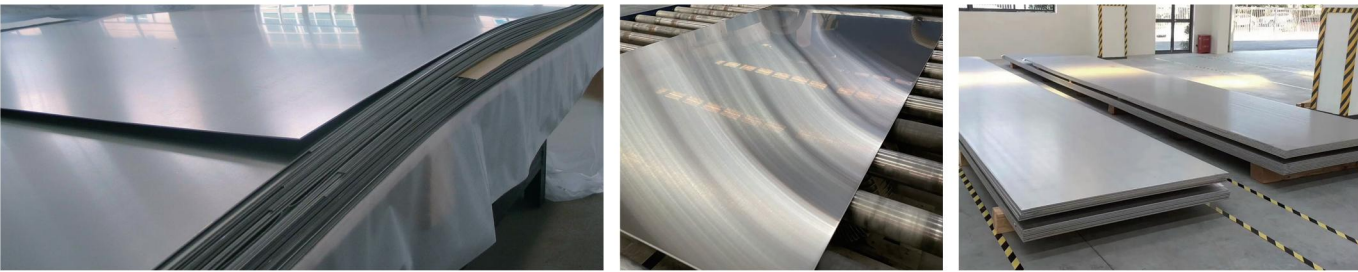


One of the reasons why stainless steel tubing is used in so many different ways is because it can be custom-manufactured in an extensive range of sizes and configurations. While some manufacturers specialize in a certain size, others like Atlantic Stainless have the facilities and technology to fabricate it in tiny sizes for use as hypodermic tubing, all the way up to very large sizes for use as pipes and industrial tubes. It's incredible to imagine that the same product can serve so many potential purposes when its size is changed! The measurements that come into play when choosing the ideal size of tubing for any given application are wall thickness, inner diameter, and outer diameter. Once those are chosen then the tube can be welded and drawn or cut and formed in any length!

Product Name	Seamless Stainless Steel Pipe /Tube	
Steel grade	200 series,300 series,400 series	
Standard	ASTM A213,A312,ASTM A269,ASTM A778,ASTM A789,DIN 17456, DIN17457,DIN 17459,JIS G3459,JIS G3463,GOST9941,EN10216, BS3605,GB13296	
Material	304,304L,309S,310S,316,316Ti,317,317L,321,347,347H,304N,316L, 316N,201,202	
Surface	Polishing,annealing,pickling,bright	
Type	hot rolled and cold rolled	
Size	Wall thickness	1mm-150mm(SCH10-XXS)
	Outer diameter	6mm-2500mm (3/8"-100")
Delivery time	Prompt delivery or as the order quantity.	
Package	1.By bundles, each bundle weight under 3 tons, for small outer diameter seamless steel pipe, each bundle with 4-8 steel strips; 2.After making by bundle, covered with Polyethylene waterproof cloth; 3.Customized is accepted.	
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 Plate

material	201, 202, 304, 304L, 316, 316L, 309S, 310S, 317L, 321, 409, 409L, 410, 420, 430, etc
surface	2B, BA, HL, 4K, 6K, 8KNO. 1, NO. 2, NO. 3, NO. 4, NO. 5, and so on
standard	AISI, ASTM, DIN, EN, GB, JIS, etc
specification	(1) thickness: 0.3mm- 100mm (2) width: 1000mm, 1250mm, 1500mm, 1800mm, 2000mm, etc (3) length: 2000mm, 2440mm, 3000mm, 6000mm, etc (4) The specifications can be provided as clients' requirement.
application	(1) Construction, decoration (2) petroleum, chemical industry (3) electrical appliances, automotive, aerospace (4) house ware, kitchen appliances, cutlery, foodstuff (5) surgical instrument



Stainless Steel Bar



Type	Round bar,Angle bar,Channel bar,Square bar,Flat bar,I/H bar,Hexagonal bar and profiles
Surface	Black,bright,rough turned,grinding,centreless Ground etc
Standard	GB,AISI,ASTM,DIN,EN,SUS,UNS etc
Diameter	0.5-500mm
Technique	H8,H9 or as required
Grade	200 series: 201,202,202Cu,204Cu, 300 series: 301,303/Cu,304/L/H,304Cu,305,309/S,310/S,316/L/H/Ti,321/H,347/H,330, 400 series:409/L,410,416/F,420/F,430,431,440C,441,444,446, 600 series: 13-8ph,15-5ph,17-4ph,17-7ph(630,631),660A/B/C/D

PRODUCT SPECIFICATION

PPGI

About Ppgi

The term is an extension of GI which is a traditional abbreviation for Galvanized Iron. Today the term GI typically refers to essentially pure zinc (>99%) continuously hot dip coated steel, as opposed to batch dip processes. PPGI refers to factory pre-painted zinc coated steel, where the steel is painted before forming, as opposed to post painting which occurs after forming.

The hot dip metallic coating process is also used to manufacture steel sheet and coil with coatings of aluminium, or alloy coatings of zinc/aluminium, zinc/iron and zinc/aluminium/magnesium which may also be factory pre-painted. While GI may sometimes be used as a collective term for various hot dip metallic coated steels, it more precisely refers only to zinc coated steel.

Similarly, PPGI may sometimes be used as a general term for a range of metallic coated steels that have been pre-painted, but more often refers more precisely to pre-painted zinc coated steel.

Zinc coated steel substrate for PPGI is typically produced on a continuous galvanizing line (CGL). The CGL may include a painting section after the hot dip galvanising section, or more commonly the metallic coated substrate in coil form is processed on a separate continuous paint line (CPL). Metallic coated steel is cleaned, pre-treated, applied with various layers of organic coatings which can be paints, vinyl dispersions, or laminates. The continuous process used to apply these coatings is often referred to as Coil Coating.

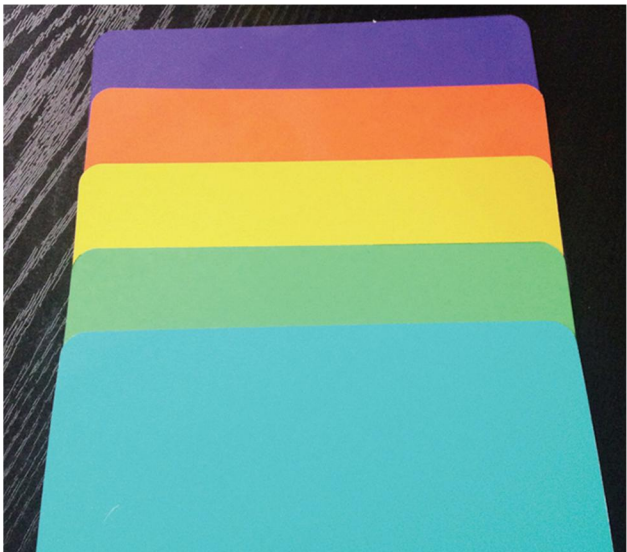


Ppgi application

The main uses of pre-painted Ppgi are home appliances and construction.

Home appliance uses are mainly side door panels for refrigerators, and shells for air conditioners, freezers, and washing machines. The construction field is more widely used than home appliances.

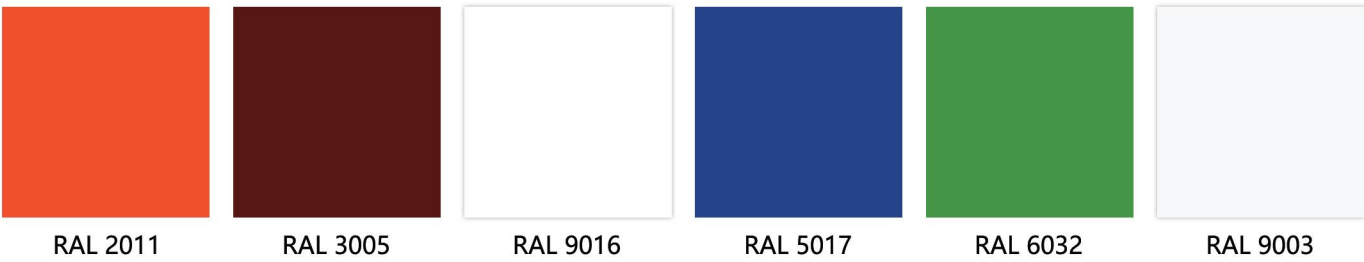
PPGI for construction is used for roofing, guttering, sandwich panels, industrial building facades, cold storage panels, and rolling doors.



Standard Color

Our ppgi has a variety of colors for you to choose from. You can see part of RAL color cards here for reference of the colors you need. You can also visit our ppgi factory, where you can see the colors of these ppgi more directly.

If you need to know more colors, please contact our sales staff, we will provide you with the most detailed parameters and the products you need, I hope our quality service can let you get the most comfortable shopping experience.



Product specification

PPGI 彩涂卷

Standard	ASTM, JIS,EN,DIN.GOST, GB, etc.
Grade	SGCC,CGCC,SGCH,DX51D+Z/DX53D+Z/S220GD-550GD
Thickness	0.13-0.70mm
Width	Max1250mm(600~1250mm)
Length	By coil
Base material	GI/GL/PPGI/PPGL
Zinc Coating	20g/m²to 275g/m²
Coil Weight	3.5-5 ton for normal standard or as customer's request
Painting Thicknes	Top side: 10-25microns; Back side: 3-20microns
Colour	RAL NO./Your sample
Coil ID	508mm/610mm
Packing	Waterproof paper+plastic film+iron packing+bundling, or as per customers request
Application	Corrugated roofing sheet, Ceiling channel, industrial refrigeration, cold storedoor panel, sandwich panel, PU panel

Coating Thickness Selection

The top coating is larger than 20µm to prevent the intrusion of corrosive media. Due to the different anti-corrosion mechanisms of primer and finish coating, not only the total coating thickness should be guaranteed, but also the thickness of primer (>5µm) and finish coating (>15µm).

PVDF pre-painted steel coil requires a thicker coating. It provides a longer service life. The requirements for the backside paint coating depend on the application, and the sandwich panel only requires a layer of primer. The formed steel plate requires two coats. The thickness is at least greater than 10 µm.

PRODUCT SPECIFICATION

Roofing Sheet

About Roofing Sheet

Roofing Sheet Roofing sheet is a color coated steel sheet which is cold formed by roller into various wave shapes.

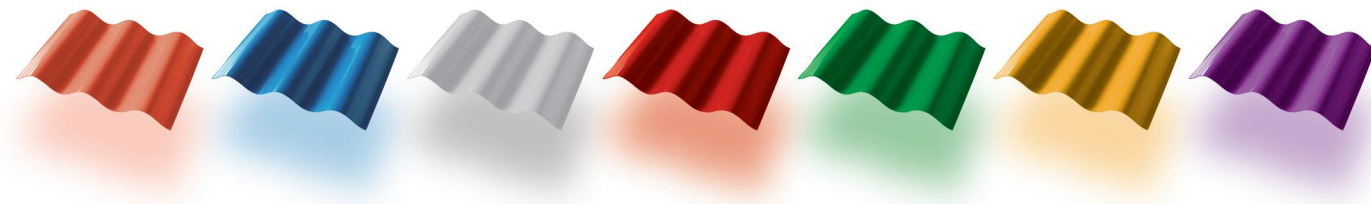
It is suitable for industrial and civil buildings, warehouses, special buildings, large-span steel structure of the roof, wall and interior and exterior wall decoration, with light weight, high strength, rich color, convenient construction, seismic, fire, rain, long life, maintenance-free and other characteristics, has been widely used.

Color

In general, dark-color roofs retain heat and are well-suited to cold-weather climates; conversely, light and white roofs, which reflect heat, are good choices for warmer regions. Dark-color roofs recede to minimize a home's visual mass and downplay roof-peak height differences; lighter roofs do the opposite, causing homes to look bigger and roofs to look taller. Here are a few other things to consider when choosing a color for your home's roof.

Some reliable color combinations include the following: dark gray or black shingles capping white, gray, yellow, and blue homes; a brown, gray, or black roof topping yellow, green, and red homes; and brown shingles or earth-tone blends crowning green, brown, cream, and tan exteriors.

The following are the colors that our customers often choose for your reference:



Galvanized Steel Roofing Sheet

Galvanized steel roofing sheet combines galvanized steel with corrugated design to provide great strength. It is also lightweight, which makes it easy and quick to install. That's why galvanized roof panels are widely used in agricultural, industrial, commercial and residential buildings, such as warehouses, makeshift houses, barns, garages, etc. Wanzhi Steel has galvanized roofing sheets for sale in different thicknesses, lengths, and designs. Also, we will offer custom solutions to better meet your projects.

Application

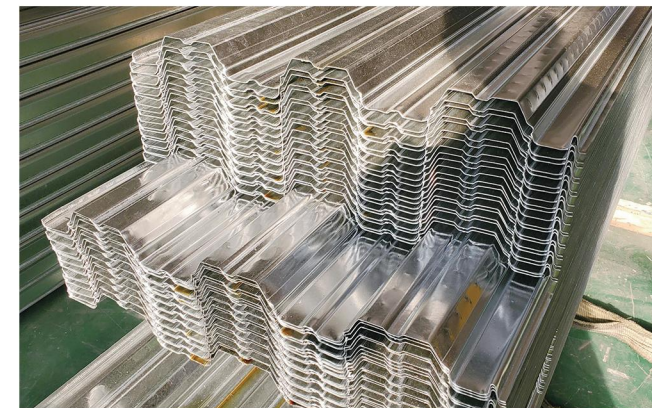
- 1.construction:prefabricated house,steel house,mobile house,modular house,villa, bungalow design,portable house/carbin,ready made house,kiosk booths,steel building...
- 2.container manufacturing
- 3.household appliances and furniture
- 4.vehicle and vessel manufacturing
- 5.others,like machinery structure parts,manufacturing shells of motors and so on

Galvanized floor bearing plate

The steel structure floor adopts profiled metal plate as permanent support, and the formwork works together with the cast-in-situ reinforced concrete structural layer to form the permanent composite structure of the building. It is used to be called structural floor bearing plate.

The floor bearing plate also includes baffle, sealing plate, edge closing plate and other auxiliary components. The floor bearing plate is laid and connected with the steel beam, the plate end is welded with the steel beam through penetration spot welding, and the middle is welded with the steel beam through penetration stud.

Steel bearing plate is an important supporting product of steel structure building, which has the advantages of simple and fast construction and short construction period; Replace the traditional template and improve the shortcomings of the traditional template; It can be used as a part of structural strength to reduce material cost; Easy construction of reinforcement, wiring and piping; Clean and beautiful appearance; It has the characteristics of light weight, high strength, large bearing capacity and good seismic capacity. Floor bearing plate belongs to the main category of profiled steel plate. Sometimes profiled steel plate can also refer to floor bearing plate, which is formed by pressing galvanized sheet, with a thickness of 0.7-1.5mm.



That is, the steel bearing plate of floor structure, which is characterized by:

1. No formwork is required, and the disassembly and installation of formwork are avoided
2. The tensile reinforcement in the concrete floor slab can be omitted
3. Provide a flat ceiling surface for the concrete floor
4. Easy to transport, store, stack and load and unload
5. After installation, it can be used as a safe working platform
6. The corrugated room can be used for power, communication and other projects
7. Reduce the dead load of the whole structure and save the cost of the lower foundation
8. Greatly shorten the construction period, suitable for high-rise, super high-rise buildings and large multi-storey industrial plants



PRODUCT SPECIFICATION

Aluminium Alloy Profile

An alloy based on aluminum with a certain amount of other alloying elements is one of the light metal materials. In addition to the general characteristics of aluminum, aluminum alloys have some specific characteristics due to the different types and amounts of alloying elements added. The density of aluminum alloy is 2.63 ~ 2.85g/cm³, has high strength (σb is 110 ~ 650MPa), the specific strength is close to high alloy steel, the specific stiffness exceeds steel, has good casting performance and plastic processing performance, good electrical and thermal conductivity, good corrosion resistance and weldability, can be used as structural materials. It is widely used in aerospace, aviation, transportation, construction, electromechanical, light and daily necessities.

Aluminum alloy is divided into deformed aluminum alloy and cast aluminum alloy according to its composition and processing method. The deformed aluminum alloy is first fused into billets, then plastic deformation processing, through rolling, extrusion, stretching, forging and other methods to make a variety of plastic processing products. Casting aluminum alloy is the blank of various parts directly cast by sand mold, iron mold, investment mold and die casting after melting.



All products can be customized according to the customers' drawings.
Surface Treatments for Aluminium Extrusion profile:

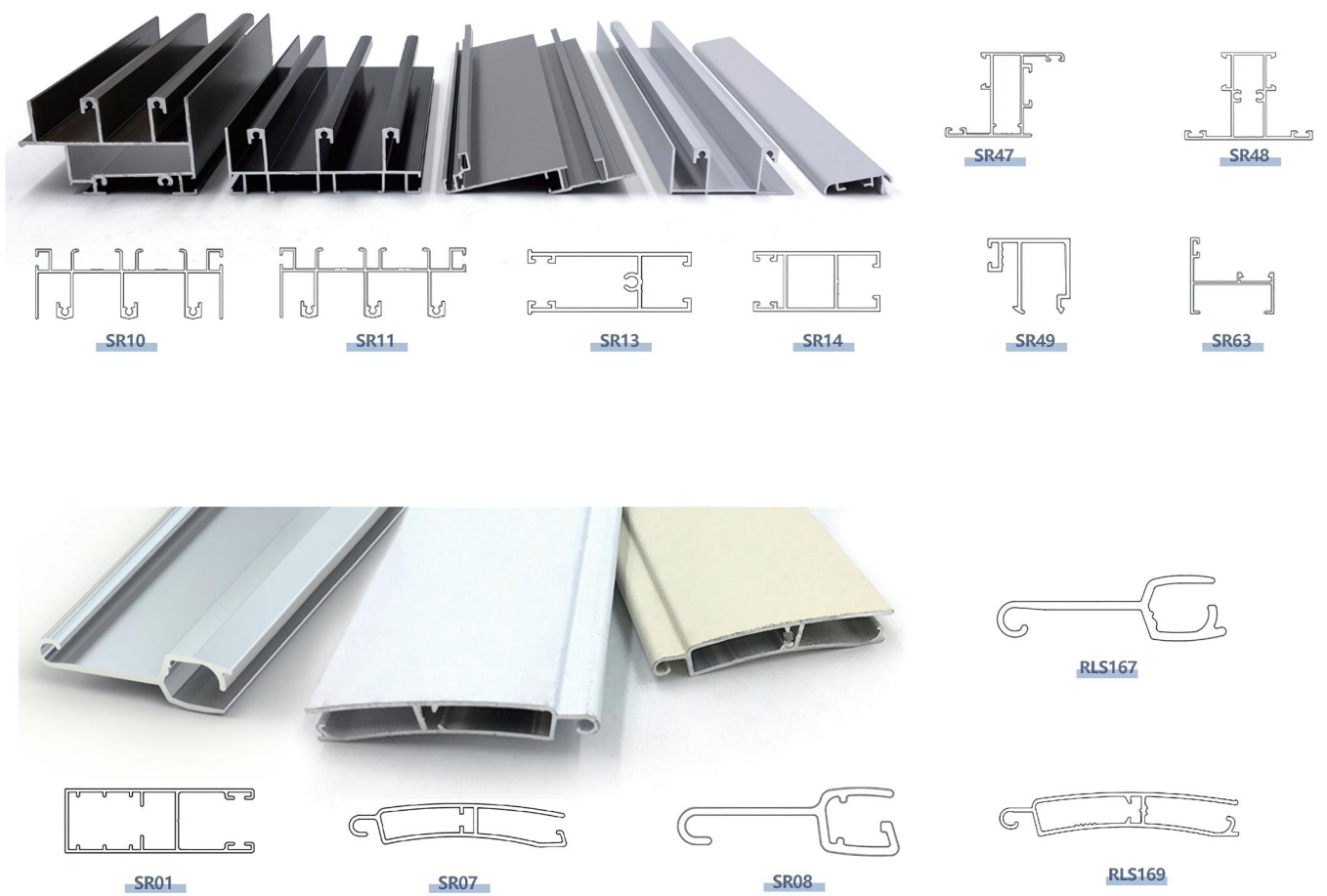
- * Mill Finish
- * Anodizing(Color: Silver,Champagne,Bronze,Black,Gold,etc.)
- * Electrophoresis (Color: Silver,Champagne,Bronze,Black,Gold,etc.)
- * Powder Coating (Color: Can be matched according to the requested color sample)
- * Fluorine Carbon Wet Painting(Color: Can be customized according to the sample)
- * Wood Grain (Wood-like Heat Transfer,3D,4D,5D)(Color: Can be matched color sample)

Aluminum Extrusion Profiles

Aluminum extrusion profiles are various components made of low-cost malleable aluminum alloy that has been forced through a die. The extensive variety of possible profiles that can be produced make aluminum extrusion profiles extremely useful in the manufacture of countless products on the market today.

Our facilities are certified to ISO 9001:2000 and feature in-house die making facilities, to serve your custom extrusion needs. Using our state-of-the-art technologies to design and manufacturing extrusion tooling allows us to provide you with custom solutions for your unique applications and to ensure that our solutions surpass your expectations.

Part shape of aluminum alloy profile



Product specification

Aluminium Alloy Profile 铝合金型材

Material	Alloy 6063/6061,T5/T6
Thickness	0.7-1.5MM or according to your requirements
Length	3.0-7.2Meter
Size	Customized,same as drawings or samples
Surface Treatment	Mill finish,Powder Coating,Anodizing,Wooden grain,Electrophoresis
Color	Silver,White,Black,Bronze(Analok),Champagne,Wood and any as requested
Certificate	ISO9001-2008, COC, SGS, GMC

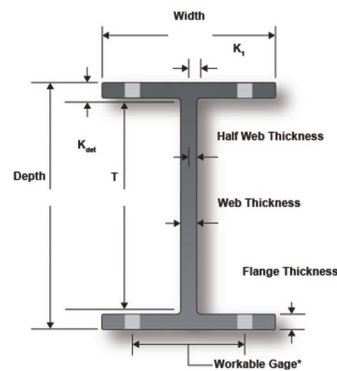
PRODUCT SPECIFICATION

Steel Section

About Steel Section

Steel sections are a key component in steel fabrication owing to their extremely versatile properties. These properties enable steel sections to be manufactured in an array of shapes and, therefore, give engineers many factors to consider when choosing sections for their projects, including weight, size and profile.

Most common usages of this section are connection between I-shapes and/or other shapes, bracing in truss members, Chords, Battens and/or Laces of built-up member, Diaphragm members in bridge girder system, Web stiffening elements for I-shape sections, etc.

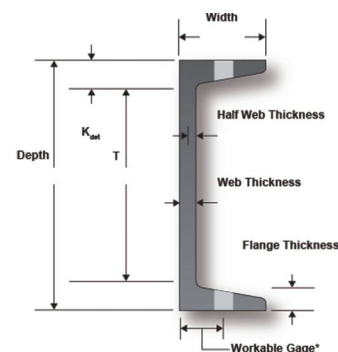


I-beams

I-beams are sometimes called the universal beam or wide flange beams. The name describes the shape of the cross-section and legs that are parallel. I-beams act as the critical support trusses in construction framework.

C-channels

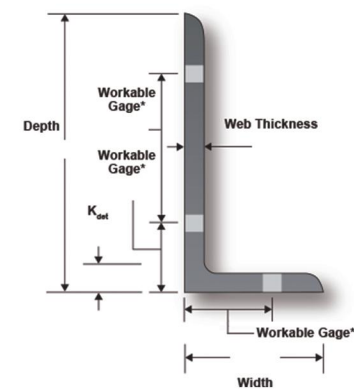
C-channels have a slight slope on the inner flange surface. They are not typically applied as primary load-bearing beams. Rather, they provide a great amount of structural support, most useful as frames and for bracing.



Product specification

Steel Section 型钢

Length	5-19m Or customer customization
Thickness	1.5mm-25mm Or customer customization
Usage	Building Construction etc
Species	Angle Sections/Channel Sections/T- Sections/I - Sections/Round Bars/Square Bars/Flat Bars/Steel Plates.etc.
Technique	Hot Rolled
Material	195/Q235/Q345/304/316L/Other Metal Materials
Quality	High Quality. Inspection
Color	Black \Silver



Angle Steel

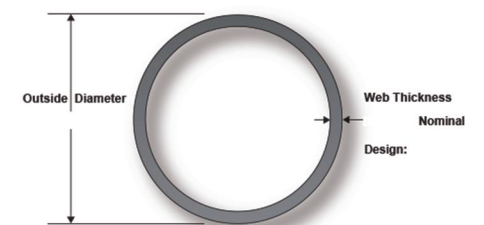
Structural steel angles is a hot rolled product with an L-shaped cross-section that's appropriate for a number of applications. A standard structural angle is 90 degrees and is measured by the length of the legs as well as the leg thickness.

L-shapes are produced with both equal and unequal leg lengths. When notating unequal leg angles in measurement, the longer leg is always first, and thickness last. All measurements are always taken from the outside.

Applications include structural reinforcement, framework, shelving, and repair.

Structural Steel Tubing – Hollow Structural Sections

Hollow structural section (HSS) refers to high-strength welded steel tubing. Sometimes referred to as hollow steel sections, they are produced in round, square, and rectangular shapes that support multidirectional load bearing. As the name suggests, regardless of shape, the mid-sections are hollow.

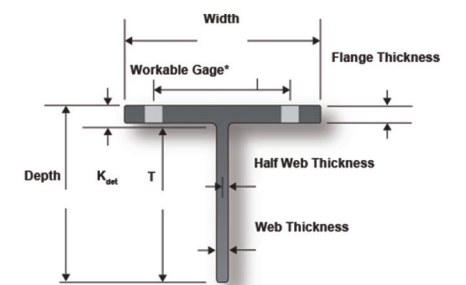


Tubes are a hollow steel shape that can be further distinguished as either mechanical or structural tubing. Mechanical tubing is used in low-stress applications and is characterized by a thinner wall. Structural tubing is designed for high-stress structural applications in bridges, buildings, roll cages, and underwater platforms. The walls are thicker and stronger.

Pipes are another hollow structure that is intended to carry liquids, gasses, or even solids. Its wall thickness is described by its schedule, which is a system created by the American Standards Association.

T-beams

T-beams have a T-shape, like the universal beam but without a bottom flange. T-beams are best for reinforcement, as they do not resist bending to bear equal weight as well as the I-beam.



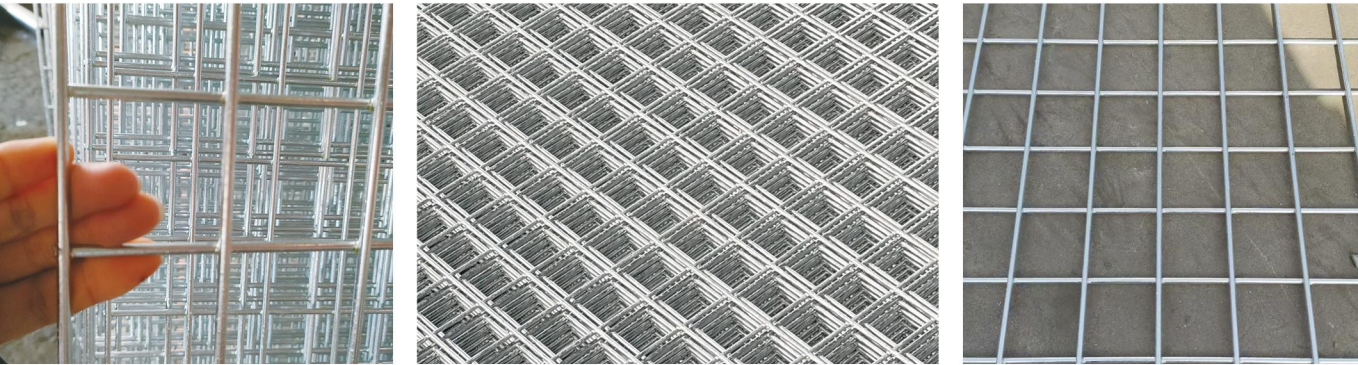
PRODUCT SPECIFICATION

Galvanized Wire Mesh

Galvanized wire mesh is composed of a number of wires that are twisted together. The twisting creates a network of tiny channels in the metal, which protects the mesh from rust and other damages.

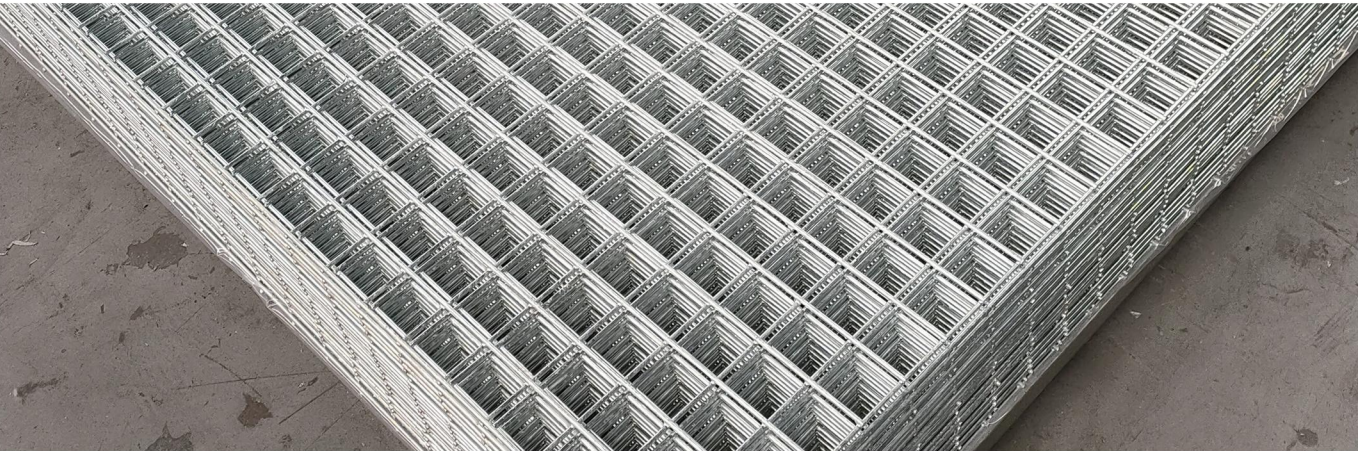
Galvanized wire mesh is strongest when placed over an area that contains high levels of stress or abuse, such as behind gates or around trees. This is because galvanized wire mesh can handle repeated impacts better than other types of fencing options.

The amount of protection that galvanized wire mesh provides depends on the quality of galvanization and zinc coating. Additionally, the size and shape of the wire can affect how well it protects against damage. There are many benefits to using galvanized wire mesh, including its durability, its low maintenance costs, and its resistance to rust.



The benefits of galvanization include

- 1. Increased lifespan. Galvanized wire mesh has a longer lifespan than regular wire mesh, due to the protection it provides against corrosion.
- 2. Reduced maintenance costs. Galvanized wire mesh requires less maintenance than regular wire mesh, as it does not corrode as easily. This means that there are fewer opportunities for problems to occur, and maintenance costs are reduced overall.
- 3. Improved safety. Galvanized wire mesh is much safer than regular wire mesh when it comes to preventing accidents and injuries. This is because it is more difficult for people or animals to get through the fence material, which reduces the risk of accidents occurring.



The benefits of galvanization include

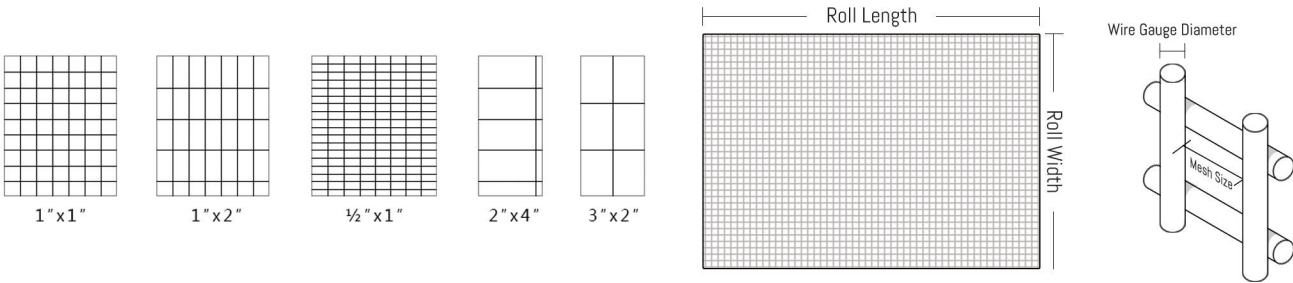
Wire mesh is a versatile material that can be used for a variety of purposes.

Galvanized wire mesh is most commonly used for fencing purposes. It is particularly popular for use in residential and commercial settings, as it provides a high level of security and protection against corrosion.

In addition to being used for fencing, galvanized wire mesh can also be found as component parts of other industrial applications, such as warehouses and manufacturing plants.

Some other applications of gi wire mesh include staining and screening. Galvanized wire mesh is available in different gauges and sizes, making it suitable for a wide range of applications. It is important to choose the right type of wire mesh for the intended application, as each type has specific benefits and drawbacks. For example, galvanized wire mesh is stronger than other types of wire mesh but less flexible.

Custom made wire mesh can be an ideal solution for certain applications. For example, if you need to create a custom shape or size of wire mesh, custom made wire mesh may be the best option for you. Alternatively, if you need to repair or replace damaged wire mesh, custom made wire mesh may be the best option for you because it will fit exactly where needed without any gaps or tears



Opening		Wire Diameter BWG
In inch	In metric unit(mm)	BWG24-22
1/4" x 1/4"	6.4 x 6.4mm	BWG22-19
3/8" x 3/8"	10.6x 10.6mm	BWG23-16
1/2" x 1/2"	12.7 x 12.7mm	BWG21-18
5/8" x 5/8"	16x 16mm	BWG21-16
3/4" x 3/4"	19.1 x 19.1mm	BWG21-16
1" x 1/2"	25.4x 12.7mm	BWG19-14
1-1/2" x 1-1/2"	38 x 38mm	BWG16-14
1" x 2"	25.4 x 50.8mm	BWG15-12
2" x 2"	50.8 x 50.8mm	BWG15-12
2" x 4"	50.8 x 101.6mm	BWG15-12
4" x 4"	101.6 x 101.6mm	BWG15-12
4" x 6"	101.6 x 152.4mm	BWG15-12
6" x 6"	152.4 x 152.4mm	BWG15-12
6" x 8"	152.4 x 203.2mm	BWG14-12

PRODUCT SPECIFICATION

Galvanized Barbed Rope

Galvanized barbed wire types and specification

Barbed wire is used for various security fencing and barriers. It can be laid directly on the ground, mounted on the top of fence or in rows as an independent barrier. To prevent corrosion, barbed wire has a zinc coating. The barbed wire consists of barb wire and line wire. The wire diameter of line wire is larger. The line wire can have one wire or two wires. The barb wires are braided with a system of constant torsion around line wire. One barb wire forms two spikes and two pieces of wire-four spikes. The sharpened spikes are protective elements of barbed wire.

Using the two twisted line wires can improve the quality of fastening studs and prevent the displacement along the wire. On a single strand barbed wire, in order to avoid spikes rotate around horizontal wire, the horizontal wire is made by corrugations and its cross section is not circular.



Hot dipped galvanized barbed wire specification:

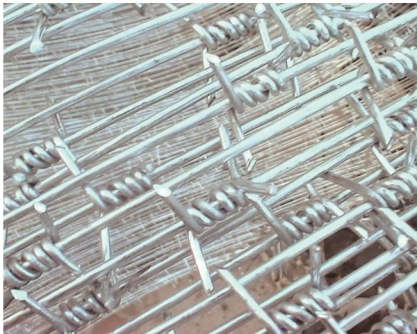
Zinc surface density: (the more zinc, the corrosion resistance is stronger.)
Horizontal line wire/barb wire (g/m2): 80/60, 114/85, 175/147, 260/240.

Galvanized single strand barbed wire size:

Made of 1 line wire with 4 spikes, spaced at a distance of 70 mm - 120 mm.
Horizontal line wire diameter 2.8 mm.
Barb wire diameter 2.0 mm.
Number of spikes 4.
Packed in coils: 25-45 kg/coil, or 100 m, 500 m/coil.

Galvanized barbed wire with double strand size:

Made of 2 twisted line wires with 4 spikes, spikes spaced at a distance of 75 mm - 100 mm.
Horizontal wire barbed wire diameter 2.5 mm/1.70 mm.
Spikes wire diameter 2.0 mm/1.50 mm.
Strength of horizontal line wire: min. 1150 N/mm2 .
Strength of barb wire: 700/900 N/mm2.
Stranded wire breaking load: min. 4230 N.
Packed in coils: 20-50 kg/coil or 50 m - 400 m/coil.



Single barbed wire is a kind of security fences with sharp edges and high-tensile wire.

Wire Materials: Galvanized steel wire, low carbon steel wire, stainless steel wire, PVC coated iron wire in blue, green, yellow and other colors.



Double barbed wire has two line wires twisted together with wire barbs attached. The wire is normally attached to wooden fence posts using a curved nail. This type is much safer than single barbed wire with the high tension.



Traditional barbed wire is made of low carbon steel wire or galvanized wire with the twisting processing by the barbed wire machines. Compared with single and double twist, traditional barbed wire is more security.

Table 1: Standard Sizes and Constructions for Barbed Wire

Design Number	Size, Steel Wire Gage	Diameter of Coated Wire, in. (mm)	Number of Barb Points	Spacing of Barbs, in. (mm)	Diameter of Barbs, Steel Wire Gage	Shape of Barbs
12-4-3-14R	12.5	0.099 (2.51)	4	3 (76)	14	round
12-4-3-12R	12.5	0.099 (2.51)	4	3 (76)	12	round
12-2-4-12F	12.5	0.099 (2.51)	2	4 (102)	12.5	flat
12-2-4-13F	12.5	0.099 (2.51)	2	4 (102)	13	flat
12-2-4-14R	12.5	0.099 (2.51)	2	4 (102)	14	round
12-2-5-12F	12.5	0.099 (2.51)	2	5 (127)	12.5	flat
12-4-5-14R	12.5	0.099 (2.51)	2	5 (127)	14	round
12-4-5-14H	12.5	0.099 (2.51)	4	5 (127)	14	half-round
12-4-5-14R	12.5	0.099 (2.51)	4	5 (127)	14	round
13-2-4-14R	13.5	0.086 (2.18)	2	4 (102)	14	round
13-4-5-14R	13.5	0.086 (2.18)	4	5 (127)	14	round
14-2-4-14F	14	0.080 (2.03)	2	4 (102)	14	flat
14-2-5-14F	14	0.080 (2.03)	2	5 (127)	14	flat
14-4-3-14F	14	0.080 (2.03)	4	3 (76)	14	flat
14-4-5-14F	14	0.080 (2.03)	4	5 (127)	14	flat
14-2-5-14R	14	0.080 (2.03)	2	5 (127)	14	round
15-4-5-14R	14	0.080 (2.03)	4	5 (127)	14	round
15-2-5-13F	15.5	0.067 (1.70)	2	5 (127)	13.75	flat
15-2-5-14R	15.5	0.067 (1.70)	2	5 (127)	14	round
15-4-5-16R	15.5	0.067 (1.70)	4	5 (127)	16.5	round
15-4-3-16R	15.5	0.067 (1.70)	4	3 (76)	16.5	round

PRODUCT SPECIFICATION

Carbon Tube

About Carbon Tube

Carbon steel piping provides safety and durability. Because it is shock resistant and not affected by harsh environmental conditions like pressure or extreme weather, it is an ideal material for structural applications.

The incredible strength of carbon steel means that carbon steel pipe can be made thinner and with less material while still being able to transport high volumes. This makes carbon steel piping a cost-effective material. Not only can less of it be used, but carbon steel is also recyclable, making it both environmentally-friendly and cost-effective.

Because it's easy to manufacture, carbon steel piping is a versatile material. We can make it in a variety of thicknesses and dimensions. It's also easy to cut and bent to fit wherever it's needed. Its also easily connected to joints, valves, and other pipe fittings.



About Galvanized Steel Pipe

Galvanized Steel Pipe made the molten metal react with the iron matrix and produce the alloy layer, so that the matrix and the coating of the two combination. First, the steel pipe is pickled. In order to remove the iron oxide on the surface of the steel pipe, after pickling, it is cleaned by ammonium chloride or zinc chloride aqueous solution or mixed aqueous solution of ammonium chloride and zinc chloride, and then sent to the hot dip plating tank. Galvanized Steel Pipe has the advantages of uniform coating, strong adhesion, long service life, etc.



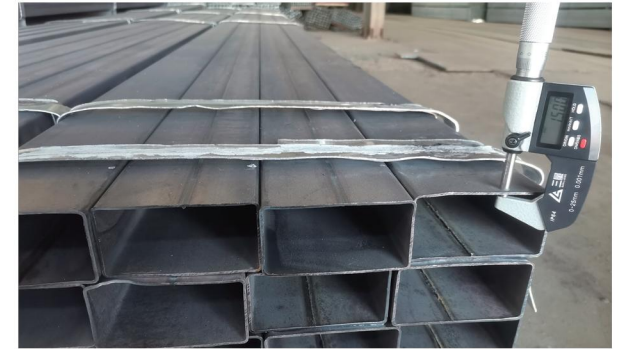
The matrix of Galvanized Steel Pipe and the molten plating solution underwent a complex physical and chemical reaction to form a compact zinc-iron alloy layer with corrosion resistance. The alloy layer is integrated with the pure zinc layer and the steel tube matrix, so its corrosion resistance is strong.



About Square Steel Pipe

The square tube is divided according to the production process: hot rolled seamless square tube, cold drawn seamless square tube, extruded seamless square tube, welded square tube. Among them, the welded square tube is divided into:

- (a) According to the process-arc welding square tube, resistance welding square tube (high frequency, low frequency), gas welding square tube, furnace welding square tube
- (b) According to the weld seam-straight seam welded square tube, spiral welded square tube



About Seamless Steel Pipe

Seamless steel pipes are perforated from whole round steel, and steel pipes without welds on the surface are called seamless steel pipes. According to the production method, seamless steel pipes can be divided into hot-rolled seamless steel pipes, cold-rolled seamless steel pipes, cold-drawn seamless steel pipes, extruded seamless steel pipes, and top pipes. According to the cross-sectional shape, seamless steel pipes are divided into two types: round and special-shaped. Special-shaped pipes include square, oval, triangular, hexagonal, melon seed, star, and finned pipes.



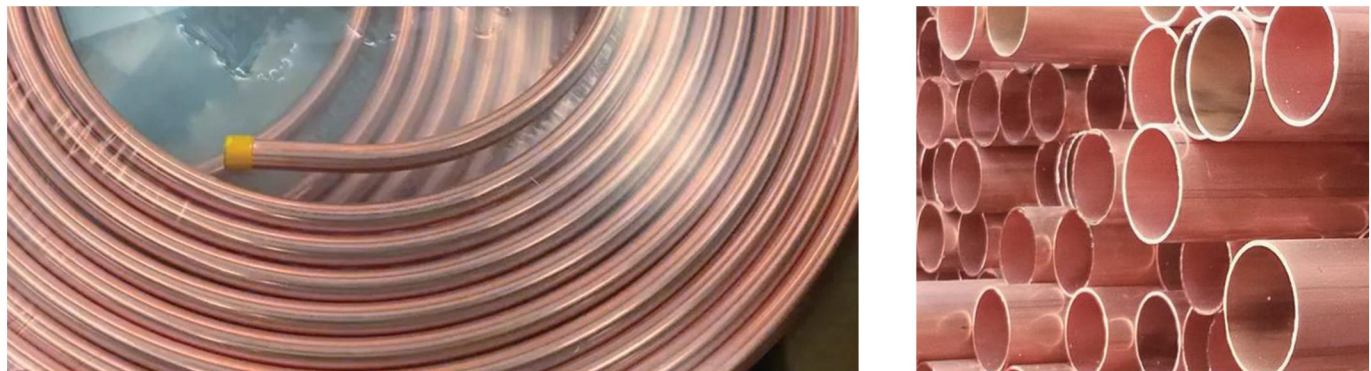
PRODUCT SPECIFICATION

Copper Tube

About Copper Tube

Copper pipe (also known as red copper pipe), often used in water pipes, heating and cooling pipes, can be used in different environments. Copper pipe set the advantages of metal and non-metal pipe in a body, in the hot and cold water system exclusive torture, is the best connection pipe. Copper pipes are refractory and heat-resistant, and can maintain their shape and strength at high temperature without aging.

The pressure resistance of copper pipe is several times or even dozens of times that of plastic pipe and aluminum plastic pipe, and it can withstand the highest water pressure in today's buildings. In the hot water environment, with the extension of service life, the bearing capacity of plastic pipe significantly decreases, while the mechanical properties of copper pipe remain unchanged in all thermal temperature ranges, so its pressure resistance will not be reduced, nor will aging occur.



The linear expansion coefficient of copper pipe is very small, is 1/10 of plastic pipe, will not cause stress fatigue rupture because of excessive thermal expansion and cold contraction.

The strength of copper pipe is greater, and the outside diameter is smaller to ensure the effective inside diameter, which is more suitable for hidden burial.

Types

Soft copper

Soft (or ductile) copper tubing can be bent easily to travel around obstacles in the path of the tubing. While the work hardening of the drawing process used to size the tubing makes the copper hard or rigid, it is carefully annealed to make it soft again; it is, therefore, more expensive to produce than non-annealed, rigid copper tubing. It can be joined by any of the three methods used for rigid copper, and it is the only type of copper tubing suitable for flare connections. Soft copper is the most popular choice for refrigerant lines in split-system air conditioners and heat pumps.

Rigid copper

Rigid copper is a popular choice for water lines. Rigid or "Hard" copper tubing is generally referred to as "pipe". Copper "piping" is referred to by nominal pipe size, or the inner diameter. It is joined using a solder/sweat, roll grooved, compression, or crimped/pressed connection. Rigid copper, rigid due to the work hardening of the drawing process, cannot be bent and must use elbow fittings to go around corners or around obstacles. If heated and allowed to cool in a process called annealing, rigid copper will become soft and can be bent/formed without cracking.

Product specification

Copper Tube 铜管

Application	Air Condition Or Refrigerator
Specification	Customized
Grade	copper
Length	customized
Cu (Min)	0.99
Alloy Or Not	Non-Alloy
Ultimate Strength (≥ MPa)	550
Elongation (≥ %)	99
Wall Thickness	0.2-120mm
Outside Diameter	6mm,8mm.15mm.12mm etc
Processing Service	Bending, Decoiling, Welding, Punching, Cutting
Shape	Round. Square. Rectangular
Model Number	C11000 C10200 C12000 C12200
Cu (Min)	0.9999
longation (≥ %)	0.4



Characteristic

Light weight, good thermal conductivity, low temperature strength. Often used in the manufacture of heat transfer equipment (such as condenser, etc.). It is also used to assemble cryogenic pipelines in oxygen production equipment. Small diameter copper pipe is often used to transport pressure liquids (such as lubrication systems, oil pressure systems, etc.) and used as gauges, etc.

It is strong, with the high strength of general metal; At the same time, it is easier to bend, twist, crack and break than the general metal, and has a certain anti-frost heave and anti-impact ability, so the copper water pipe in the water supply system in the building once installed, safe and reliable to use, even without maintenance and maintenance.

Specific classification

Copper condensing pipe, crystallizer copper pipe, air conditioning copper pipe, all kinds of extruded, drawn (reverse extruded) copper pipe, iron white copper pipe, brass pipe, bronze pipe, copper pipe, beryllium copper pipe, tungsten copper pipe, phosphor bronze pipe, aluminum bronze pipe, tin bronze pipe, imported copper pipe. Thin-wall copper pipe, capillary copper pipe, metal copper pipe, special-shaped copper pipe, small copper pipe, pen copper pipe, pen copper pipe, etc.; According to user needs, according to the drawings processing and production of square, rectangular mold copper pipe, and D type copper pipe, eccentric copper pipe.

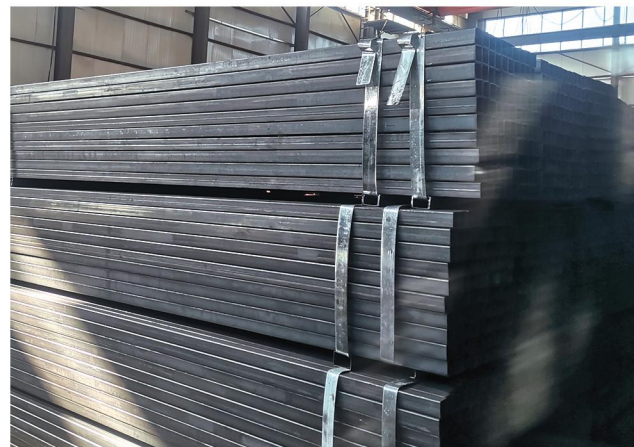
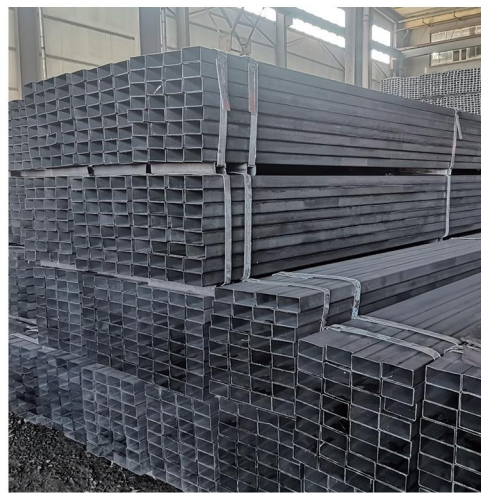
PRODUCT SPECIFICATION

Square Steel Pipe

About Square steel pipe

The square tube is divided according to the production process: hot rolled seamless square tube, cold drawn seamless square tube, extruded seamless square tube, welded square tube. Among them, the welded square tube is divided into:

- (a) According to the process-arc welding square tube, resistance welding square tube (high frequency, low frequency), gas welding square tube, furnace welding square tube
(b) According to the weld seam-straight seam welded square tube, spiral welded square tube



Product specification

Square Steel Pipe 黑方管

Product Name	MS square steel pipe
Technique	hot rolled welded
Standard	GB/T6728-2002,GB/T6725-2002, GBT3094-2000,JG 178-2005, ASTM A500 JIS G3466,EN10210
Grade	Q195, Q235, Q345, S235JR, St37-2
Diameter	10x10mm to 600x600mm
Thickness	0.5mm-20mm
Length	6m, 9m, 12m, or other length as request
Surface Treatment	Oiled, black painted or hot dip galvanized
Packing	strapped with steel strips to prevent damage from transportation,wrapped by PP cloth
Applications	Structure pipe in constructions, low-pressur fluid service,bridge,highway,windows of model steel door, fence, heating facilities etc.
Payment Items	T/T or L/C at sight

Square Steel Tube is a welded structural grade tubing that is available in either type A513 or A500 Grade B, depending on it's size and wall thickness. Either grade is ideal for all structural applications, general fabrication, manufacturing and repairs. Steel Square Tube is widely used in industrial maintenance, agricultural implements, transportation equipment, truck beds, trailers, frames, etc. It's box-shape configuration allows for much greater strength and rigidity compared to angles or channels. This steel shape is easy to weld, cut, form and machine with the proper equipment and knowledge.

CHARACTERISTICS:

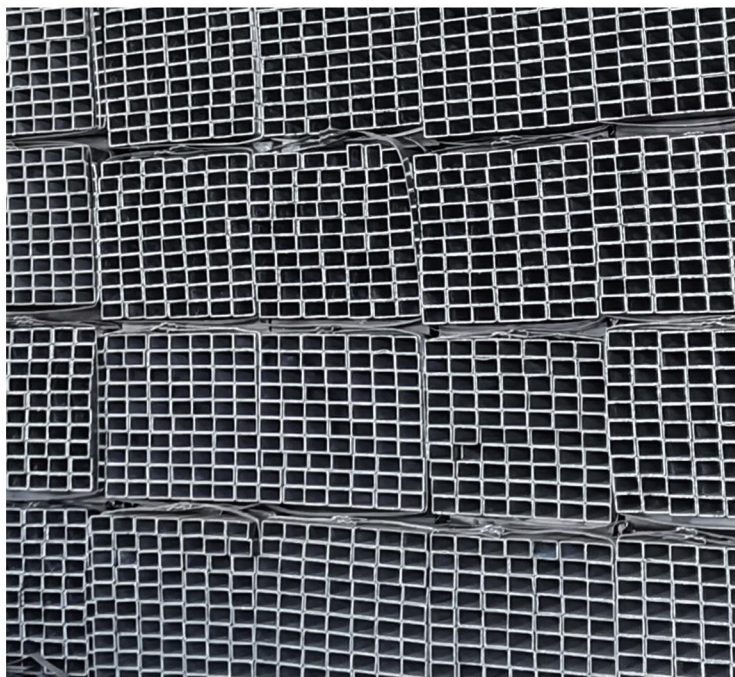
- Welding = Excellent
- Machining / Grinding = Good
- Bending / Forming = Fair
- Wear Resistance = Fair
- Corrosion Resistance = Poor

MECHANICAL PROPERTIES:

MECHANICAL PROPERTIES:
Yield Point = 62 ksi (A513); 46 ksi (A500)
Tensile Strength = 72 ksi (A513); 58 ksi (A500)
Elongation in 2" = 10% (A513); 23% (A500)
Outside Corner Radius = 3X wall max.
*Data provided for reference only

FINISH:

A513 - Dark Blue/Black, smooth slight oil coating
A500 - Blue/Dark Gray, slightly grainy, dry



PRODUCT SPECIFICATION

Galvanized Iron Wire

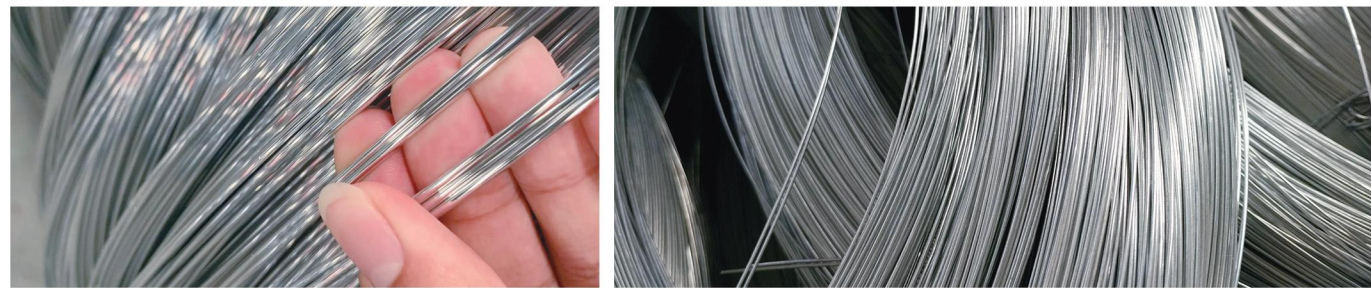
Galvanized wire is made of high quality low carbon steel wire rod processing, is the use of high quality low carbon steel, after drawing forming, pickling rust removal, high temperature annealing, hot galvanized. It is processed by cooling and other technological processes. Galvanized wire is divided into hot galvanized wire and cold galvanized wire (electric galvanized wire).

Production technology

It is made of high quality low carbon steel wire rod processing, is the use of high quality low carbon steel, after drawing forming, pickling rust removal, high temperature annealing, hot dip galvanizing. Cooling and other process processing.

Peculiarity

Galvanized iron wire has good toughness and elasticity, and the maximum zinc content can reach 300 grams/square meter. It has the characteristics of thick galvanized layer and strong corrosion resistance.



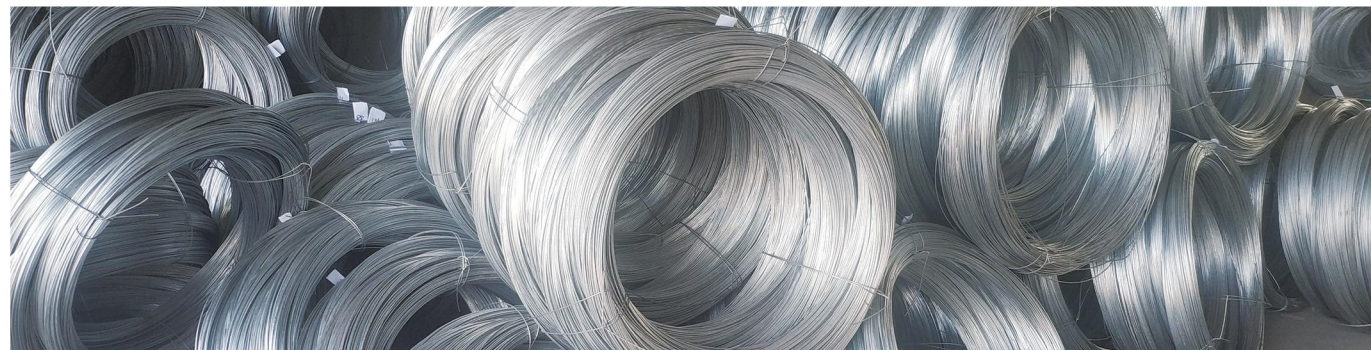
Application

Products are widely used in construction, handicrafts, wire mesh, highway guardrail, product packaging and daily civilian and other fields.

Building binding wire is 22# (0.71mm), low price, its characteristics of good flexibility, not easy to break, is one of the most ideal binding wire in the construction industry, mainly using low zinc cold plating treatment of iron wire. Mainly used low zinc cold plating treatment of iron wire.

Handicraft wire, the use of a wire special processing, no broken, the amount of zinc uniform bright, the general price is slightly more expensive.

Galvanized wire also includes scattering: one plate per roll weight of about 100kg-1000kg, mainly suitable for industry, agriculture, animal husbandry.



Product specification

Galvanized Iron Wire 镀锌铁丝

Product Name	Galvanized Wire
Package	5kgs/roll, pp film inside and hassian cloth outside or pp woven bag outside
	25kgs/roll, pp film inside and hassian cloth outside or pp woven bag outside
	50kgs/roll, pp film inside and hassian cloth outside or pp woven bag outside
Material	Q195/Q235
Production QTY	1000tons/Month
MOQ	5 tons
Application	Binding wire
Payment term	T/T, L/C or Western Union
Delivery time	about 20days after pre-payment



Five knowledge of galvanized iron wire

Cost Efficient

Less expensive than other wire products, galvanized wire is cost-efficient. With an ability to be produced in mass quantities at a relatively low cost, it's a no-brainer to purchase galvanized wire for your next project or business venture.

Long Lasting

With a lifespan upwards of 50 years, galvanized wire costs less than other wire products and lasts longer than them too. What's more, on top of having a really long lifespan, those who choose galvanized wire will come to realize its also very low maintenance due to its strong protective outer layer.

Zinc Protects Best

Galvanized wire that is coated with zinc is by far the best option and most effective compared to wire coated in paint or enamel. Even when zinc is scratched or eroded, it still protects the steel underneath and exposed areas. Zinc provides a greater electronegativity than other materials, which makes it the best protectant.

Reliable Performance

As we stated before, galvanized wire is reliable with a permanently bonded tough coating of zinc. It does not shrink, warp, or twist unlike other materials and superior to plain steel.

Withstand the Elements

Galvanised materials react well with other metals, acid, chemicals, and can withstand even the toughest outdoor elements. This makes galvanized wire a top choice for construction companies.

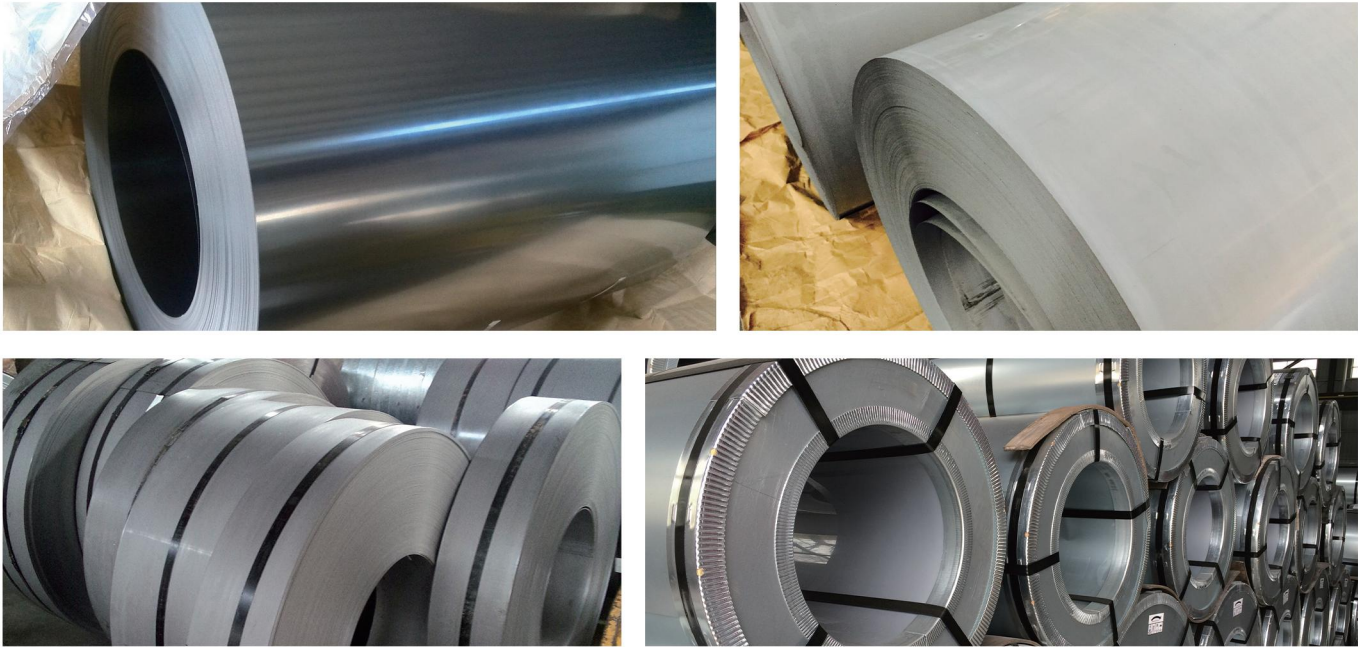
PRODUCT SPECIFICATION

Cold-rolled Grain-oriented Electrical Steel Coil

Electical steel, usually referring to cold rolled electrical steel, can be divided into two major categories including grain oriented electrical steel and non-oriented electrical steel. Grain oriented electrical steel, with its easy magnetization direction parallel to the rolling direction, has excellent magnetic properties in this direction including low core loss, high permeability and low magnetostriction and is widely used in the transformer industry. Further it can obtain lower core loss by domain refinement treatment. Meanwhile non-oriented electrical steel, featured by random distribution of grain orientation and magnetic isotropy, is widely applicable to the motor industry.

Standard Magnetic Properties

类型 Type	牌号 Grade	公称厚度 Nominal thickness mm	理论密度 Theoretical density kg/dm³	最大铁损 P ₇₅₀ Max.Core loss W/kg	最小磁感 B ₅₀ o Min. Induction T	最小叠装系数 Min. Lamination factor %
普通型 Conventional	23Q110	0.23	7.65	1.1	1.82	94.5
	23Q120	0.23	7.65	1.2	1.82	95
	27Q120	0.27	7.65	1.2	1.82	95.5
	27Q130	0.27	7.65	1.3	1.82	96
	30Q120	0.3	7.65	1.2	1.82	96
	30Q130	0.3	7.65	1.3	1.82	96
	35Q135	0.35	7.65	1.35	1.82	96.5
	35Q145	0.35	7.65	1.45	1.82	96.5
高磁感型 High Induction	35Q155	0.35	7.65	1.55	1.82	96.5
	18QG085	0.18	7.65	0.85	1.86	92
	18QG095	0.18	7.65	0.95	1.86	92
	20QG085	0.2	7.65	0.85	1.86	93
	20QG095	0.2	7.65	0.95	1.86	93
	23QG085	0.23	7.65	0.85	1.88	94.5
	23QG090	0.23	7.65	0.9	1.88	94.5
	23QG095	0.23	7.65	0.95	1.88	94.5
	23QG100	0.23	7.65	1	1.88	94.5
	27QG095	0.27	7.65	0.95	1.89	95
	27QG100	0.27	7.65	1	1.89	95
	27QG120	0.27	7.65	1.2	1.89	95
	30QG100	0.3	7.65	1	1.89	95.5
	30QG105	0.3	7.65	1.05	1.89	95.5
磁畴细化 高磁感型 Domamin refined high induction	30QG120	0.3	7.65	1.2	1.89	95.5
	18RK070	0.18	7.65	0.7	1.86	92
	18RK075	0.18	7.65	0.75	1.86	92
	18RK085	0.18	7.65	0.85	1.86	92
	20RK070	0.2	7.65	0.7	1.86	93
	20RK075	0.2	7.65	0.75	1.86	93
	20RK085	0.2	7.65	0.85	1.86	93
	23RK075	0.23	7.65	0.75	1.88	94.5
	23RK080	0.23	7.65	0.8	1.88	94.5
	23RK085	0.23	7.65	0.85	1.88	94.5
	23RK090	0.23	7.65	0.9	1.88	94.5
	23RK100	0.23	7.65	1	1.88	94.5
	27RK085	0.27	7.65	0.85	1.89	95
	27RK090	0.27	7.65	0.9	1.89	95
	27RK095	0.27	7.65	0.95	1.89	95
	27RK100	0.27	7.65	1	1.89	95
	27RK120	0.27	7.65	1.2	1.89	95
	30RK095	0.3	7.65	0.95	1.89	95.5
	30RK100	0.3	7.65	1	1.89	95.5
	30RK105	0.3	7.65	1.05	1.89	95.5
	30RK120	0.3	7.65	1.2	1.89	95.5



NON Cold-rolled Grain-oriented Electrical Steel Coil

The non-oriented electrical steel features even magnetic properties in the rolling direction and in other directions. They are widely used for iron core materials of rotating machines ranging from large-size power generators to small-size precision electric motors. They are also desirable for iron core of small-size power transformers.

