



WANZHI STEEL

2021

不锈钢产品介绍

Stainless steel

—— 万智 • 集团 ——

WANZHI GROUP



万众同心，智慧先行

UNITE AS ONE.

LEAD WITH

WISDOM.

万智钢铁是中国领先的钢铁产品生产商，负责协调销售，仓储，深加工，分销，出口，以满足客户对钢铁供应链的需求。

PAGE OF CONTENTS

目录从公司概况、工厂车间、不锈钢管、不锈钢卷、不锈钢薄板、不锈钢带、不锈钢箔、不锈钢装饰板等8个方面对公司和产品进行介绍。

| | |
|--|----|
| PAGE 公司概况Company Profile | 01 |
| PAGE 工厂车间Factory Workshop | 02 |
| PAGE 不锈钢管Stainless Steel Pipe | 04 |
| PAGE 不锈钢方管Stainless Steel Square Tube ----- | 07 |
| PAGE 不锈钢圆管Stainless Steel Round Pipe ----- | 09 |
| PAGE 不锈钢焊管Stainless Steel Welded Pipe ----- | 11 |
| PAGE 不锈钢工业管Stainless Steel Industrial Pipe ----- | 13 |
| PAGE 不锈钢毛细管Stainless Steel Capillary Tube ----- | 17 |
| PAGE 不锈钢卷管Stainless Steel Coil Tube ----- | 20 |
| PAGE 不锈钢管件Stainless Steel Pipe Fittings ----- | 23 |
| PAGE 不锈钢卷Stainless Steel Coil | 29 |

| | | |
|------|--|----|
| PAGE | 不锈钢薄板Stainless Steel Sheet | 32 |
| PAGE | 不锈钢平板Stainless Steel Plain Sheet/Plate ----- | 34 |
| PAGE | 不锈钢冲压件Stainless Steel Stamping ----- | 38 |
| PAGE | 不锈钢切割件Stainless Steel Cutting ----- | 39 |
| PAGE | 不锈钢带 Stainless Steel Strip/Band | 40 |
| PAGE | 不锈钢箔Stainless Steel Foil | 43 |
| PAGE | 不锈钢装饰板 Stainless Steel Decorative Board | 45 |



公司概况

Company Profile

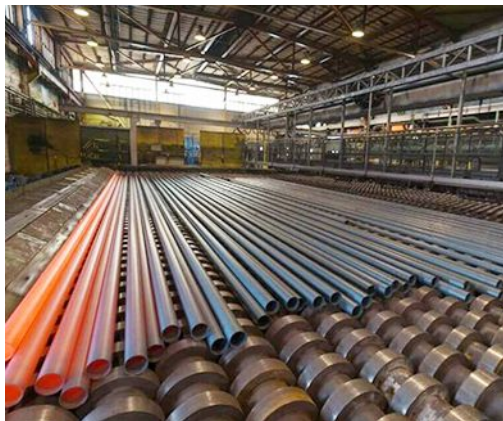
万智钢铁是中国领先的钢铁产品生产商，负责协调销售，仓储，深加工，分销，出口，以满足客户对钢铁供应链的需求。

我们的办公室位于河南省郑州市，工厂位于山东省，靠近青岛港。我们的产品涵盖碳钢，不锈钢，冷轧和热轧板，GI，GL，PPGI，PPGL，瓦楞屋顶板，夹心墙板，角钢，钢筋，钢管，钢带等，可根据客户要求定制。

Wanzhi Steel is a leading manufacturer of steel products in China, which coordinates sales, warehousing, deep processing, distribution, exporting to meet customers' steel supply chain needs. Our office is located in Zhengzhou, Henan Province, and the factory is in Shangdong Province, which is near to Qingdao Port. Our products cover carbon steel, stainless steel, cold-rolled and hot-rolled sheet, GI, GL, PPGI, PPGL, corrugated roofing sheet, sandwich wall panel, steel angle, steel bar, steel tube, steel strip, etc., which can be customized according to customers requirements.



工厂车间
Factory Workshop



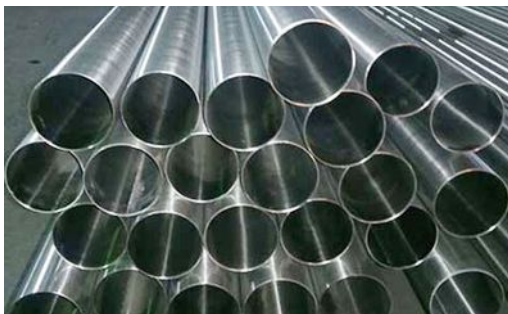
工厂车间
Factory Workshop

不锈钢管

Stainless Steel Pipe

不锈钢管是一种中空의长条圆筒状钢材，他的适用范围用作输送流体的管道，主要广泛用于石油、化工、医疗、食品、轻工、机械仪表等工业输送管道以及机械结构部件等。不锈钢管选用材质为耐酸和耐热的牌号的钢坯，经过加热、穿孔、定径、热轧、切削而成。

Stainless steel pipe is a hollow long cylindrical steel. Its scope of application is used as a pipeline for conveying fluids. It is mainly used in petroleum, chemical, medical, food, light industry, machinery and instrumentation and other industrial pipelines and mechanical structural parts. Wait. Stainless steel pipes are made of acid-resistant and heat-resistant steel billets, which are heated, pierced, sizing, hot-rolled, and cut.



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|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢管 (Stainless Steel Pipe) |
| 厚度 (Thickness) | 0.05mm-20mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | ≤12000mm 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 0.1mm-219mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM A213, ASTM A312, ASTM A789, ASTM A790 |
| 材料等级 (Material Grade) | 201/202/304/316/S31803/S32750 |
| 技术 (Technique) | 冷轧, 热轧或焊接 (Cold Rolled,Hot Rolled or Welded) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

不锈钢管是一种经济的断面钢材，是钢铁工业中的一项重要产品，可广泛用于生活装饰和工业，市面上很多人用于制作 楼梯扶手、护窗、栏杆、家具等。常见的有 201 和304 两种材质。

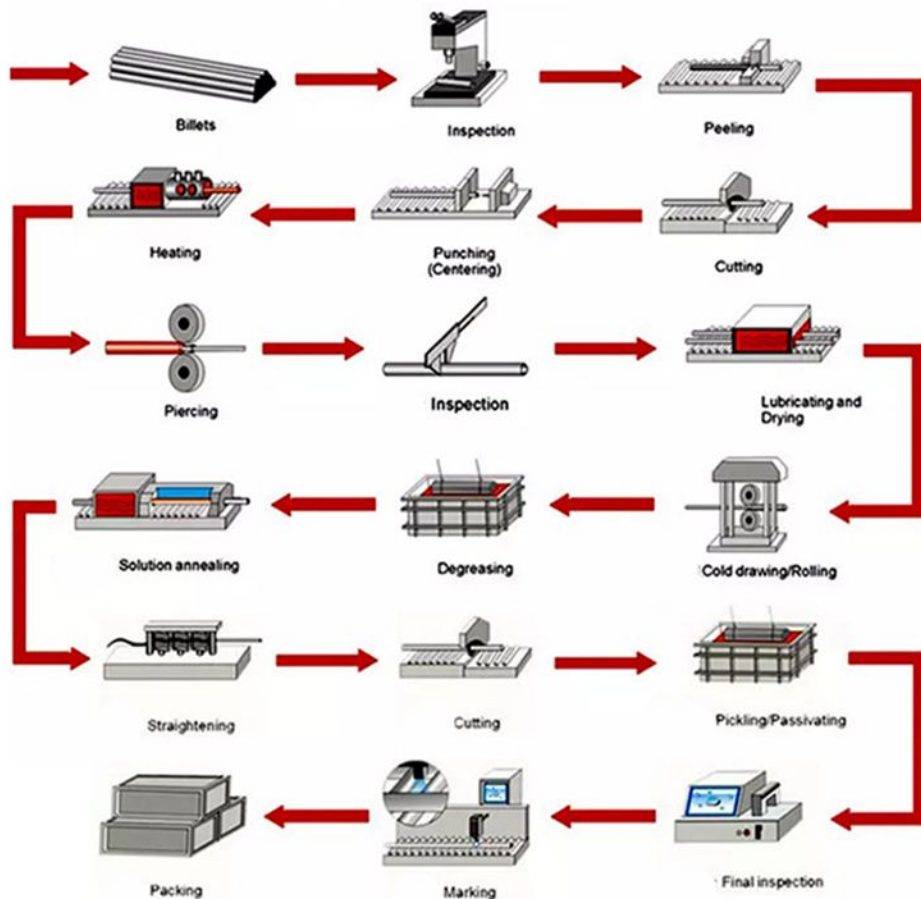
不锈钢管安全可靠、卫生环保、经济适用，管道的薄壁化以及新型可靠、简单方便的连接方法的开发成功，使其具有更多其它管材不可替代的优点，工程中的应用会越来越多，使用会越来越普及，前景看好。

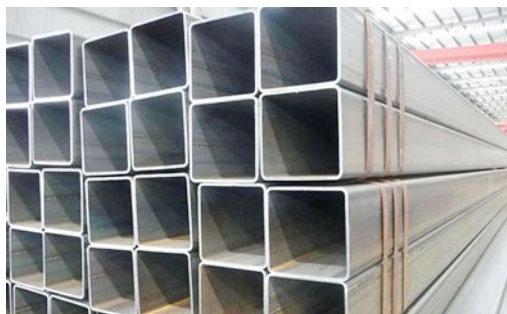
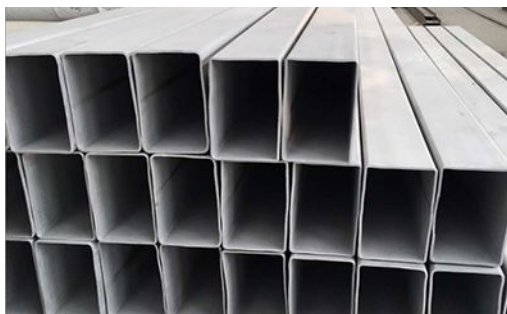
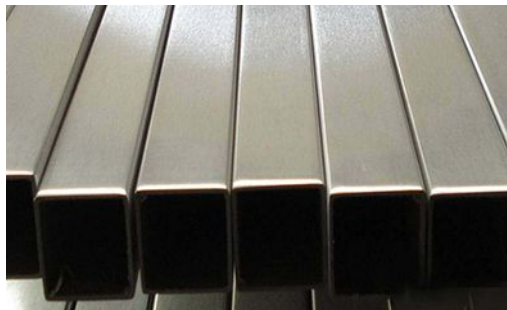
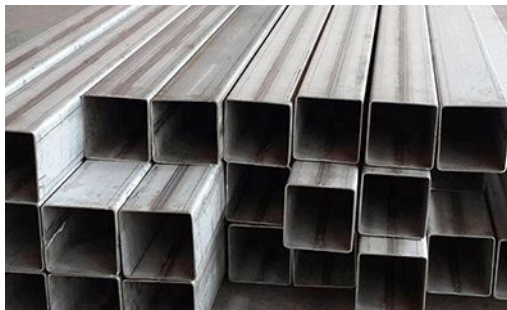
Stainless steel pipe is a kind of economical cross-section steel. It is an important product in the iron and steel industry. It can be widely used in life decoration and industry. Many people on the market use it to make stair railings, window guards, railings, furniture, etc. There are two common materials, 201 and 304.

Stainless steel pipes are safe, reliable, hygienic, environmentally friendly, economical and applicable. The thin-walled pipes and the successful development of new reliable, simple and convenient connection methods give it more irreplaceable advantages for other pipes, and more and more applications in engineering , The use will become more and more popular, and the prospects are promising.

不锈钢管的生产工艺：圆钢准备→加热→热轧穿孔→切头→酸洗→修磨→润滑→冷轧加工→脱脂→固溶热处理→矫直→切管→酸洗→成品检验

The production process of stainless steel pipe: round steel preparation → heating → hot rolling and piercing → cutting head → pickling → grinding → lubrication → cold rolling → degreasing → solution heat treatment → straightening → pipe cutting → pickling → finished product inspection





不锈钢方管 (Stainless Steel Square Tube)

不锈钢方管是一种中空处长条钢材，因为截面是正方形所以叫做方管。大量用作输送流体的管道，如石油、天然气、水、煤气、蒸气等，另外，在抗弯、抗扭强度相同时，重量较轻，所以也广泛用于制造机械零件和工程结构。

The stainless steel square tube is a hollow, long strip of steel, which is called a square tube because of its square cross-section. A large number of pipelines are used to transport fluids, such as petroleum, natural gas, water, gas, steam, etc. In addition, they are lighter when the bending and torsion strength are the same, so they are also widely used in the manufacture of mechanical parts and engineering structures.

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| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢方管 (Stainless Steel Square Tube) |
| 厚度 (Thickness) | 0.18mm-3.5mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | ≤12000mm 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 5mm-400mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/304L/TP304/TP316L/316/316L/316Ti/321/347H/310S |
| 技术 (Technique) | 冷轧, 热轧或焊接 (Cold Rolled,Hot Rolled or Welded) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

不锈钢方管分类：方管分无缝钢管和焊接钢管（有缝管）两大类。按断面形状又可分为方形和矩形管。

对于承受流体压力的不锈钢方管都要进行液压试验来检验其耐压能力和质量，在规定的压力下不发生泄漏、浸湿或膨胀为合格，有些钢管还要根据标准或需方要求进行卷边试验、扩口试验、压扁试验等。

Stainless steel square pipe classification: square pipes are divided into two categories: seamless steel pipes and welded steel pipes (seam pipes). According to the cross-sectional shape, it can be divided into square and rectangular tubes.

For stainless steel square pipes subjected to fluid pressure, hydraulic tests must be carried out to verify their pressure resistance and quality. They are qualified without leakage, wetting or expansion under the specified pressure. Some steel pipes must be coiled according to standards or requirements of the buyer. Edge test, flaring test, flattening test, etc.



不锈钢圆管 (Stainless Steel Round Pipe)

不锈钢圆管是一种中空의长条圆形钢材，主要广泛用于石油、化工、医疗、食品、轻工、机械仪表等工业输送管道以及机械结构部件等。另外，在折弯、抗扭强度相同时，重量较轻，所以也广泛用于制造机械零件和工程结构。也常用作生产各种常规武器、枪管、炮弹等。

Stainless steel round pipe is a hollow long round steel, which is widely used in petroleum, chemical, medical, food, light industry, mechanical instrumentation and other industrial pipelines and mechanical structural parts. In addition, when the bending and torsion strength are the same, the weight is lighter, so it is also widely used in the manufacture of mechanical parts and engineering structures. It is also often used to produce various conventional weapons, barrels, shells, etc.

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| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢圆管 (Stainless Steel Round Pipe) |
| 厚度 (Thickness) | 0.25m-16mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | ≤12000mm 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 6mm-630mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/304L/TP304/TP316L/316/316L/316Ti/321/347H/310S |
| 技术 (Technique) | 冷轧, 热轧或焊接 (Cold Rolled,Hot Rolled or Welded) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

不锈钢圆管可以分为不锈钢无缝钢管和不锈钢焊接钢管（有缝管）两大类。无缝不锈钢圆管也称不锈钢无缝管，是用钢锭或实心管坯经穿孔制成毛管，然后经热轧、冷轧或冷拨制成。

304不锈钢圆管全称SUS304不锈钢管，SUS304不锈钢圆管属于美国牌号材质的不锈钢管，国内牌号相当于0Cr19Ni9不锈钢管，通常用0Cr18Ni9替代。

Stainless steel round pipes can be divided into two categories: stainless steel seamless steel pipes and stainless steel welded steel pipes (seam pipes). Seamless stainless steel round tubes, also called stainless steel seamless tubes, are made of steel ingots or solid tube billets through perforation into capillary tubes, and then made by hot rolling, cold rolling or cold drawing. The full name of 304 stainless steel round pipe is SUS304 stainless steel pipe. SUS304 stainless steel round pipe belongs to American grade stainless steel pipe. The domestic grade is equivalent to 0Cr19Ni9 stainless steel pipe, which is usually replaced by 0Cr18Ni9.



不锈钢焊管 (Stainless Steel Welded Pipe)

不锈钢焊管，简称焊管，常用钢材或钢带经过机组和模具卷曲成型后焊接制成的钢管。焊接钢管生产工艺简单，生产效率高，品种规格多，设备投资少，但一般强度低于无缝钢管。

Stainless steel welded pipe, referred to as welded pipe, is a steel pipe made by welding commonly used steel or steel strips through a unit and a mold after crimping. The production process of welded steel pipe is simple, the production efficiency is high, the variety and specification are many, and the equipment investment is small, but the general strength is lower than that of seamless steel pipe.

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| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢焊管 (Stainless Steel Welded Pipe) |
| 厚度 (Thickness) | 0.25mm-3mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 3m-6m 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 16mm-119mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/201/304L/316/316L |
| 技术 (Technique) | 焊接 (Welded) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

其一、小口径不锈钢焊管是连续在线生产,壁厚越厚,机组及溶接设备的投资就越大,它就越不具有经济性和实用性。壁厚越薄,它的投入产出比就会相应下降；其次该产品的工艺决定它的优缺点，一般焊接钢管精度高、壁厚均匀、管内外表光亮度高（钢板的表面等级决定的钢管表面亮度）、可任意定尺。因此，它在高精度、中低压流体应用方面体现了它的经济性及美观性。

First, the small-caliber stainless steel welded pipe is continuously produced online. The thicker the wall, the greater the investment in the unit and welding equipment, and the less economical and practical it is. The thinner the wall thickness, its input-output ratio will decrease accordingly; secondly, the process of the product determines its advantages and disadvantages. Generally, welded steel pipes have high precision, uniform wall thickness, and high brightness inside and outside the pipe (the steel pipe is determined by the surface grade of the steel plate). Surface brightness), can be arbitrarily fixed length. Therefore, it embodies its economy and beauty in high-precision, medium and low-pressure fluid applications.



不锈钢工业管 (Stainless Steel Industrial Pipe)

不锈钢工业管是由管坯加热后热拔加工而成，后经过酸洗，表面会有灰白色酸洗层。

不锈钢工业管分为：304L不锈钢工业管，304不锈钢工业管，310不锈钢工业管，303不锈钢工业管，302不锈钢工业管，301不锈钢工业管，202不锈钢工业管，201不锈钢工业管，410不锈钢工业管，420不锈钢工业管，430不锈钢工业管等。

Stainless steel industrial pipes are processed by hot drawing after heating the billet, and then after pickling, there will be a gray-white pickling layer on the surface.

Stainless steel industrial pipes are divided into: 304L stainless steel industrial pipe, 304 stainless steel industrial pipe, 310 stainless steel industrial pipe, 303 stainless steel industrial pipe, 302 stainless steel industrial pipe, 301 stainless steel industrial pipe, 202 stainless steel industrial pipe, 201 stainless steel industrial pipe, 410 stainless steel industrial pipe , 420 stainless steel industrial pipe, 430 stainless steel industrial pipe and so on.

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| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢工业管 (Stainless Steel Industrial Pipe) |
| 厚度 (Thickness) | 0.3mm-0.4mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | ≤18300mm 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 15mm-114mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/201/304L/316/316L |
| 技术 (Technique) | 冷轧, 热轧, 焊接 (Cold rolled, hot rolled, welded) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

- 304L不锈钢工业管：作为低碳的304钢，在一般情况下，耐腐蚀性与304相似，但在焊接后或者消除应力后，其抗晶界腐蚀能力优秀，在未进行热处理情况下，也能保持良好的耐腐蚀性。
- 304不锈钢工业管：具有良好的耐蚀性，耐热性，低温强度和机械特性，冲压，弯曲等热加工性好，无热处理硬化现象。用途：餐具，橱柜，锅炉，汽车配件，医疗器具，建材，食品工业（使用温度-196℃-700℃）
- 310不锈钢工业管主要特点是:耐高温,一般使用锅炉内,汽车排气管.其他性能一般.
- 303不锈钢工业管：通过添加少量的硫、磷使其较304更易切削加工，其他性能与与304相似。
- 302不锈钢工业管：302不锈钢棒广泛用于汽车配件、航空、航天五金工具，化工。具体如下：工艺品，轴承，滑花，医疗仪器，电器等。特性：302不锈钢球属于奥氏体型钢，与304比较接近，但是302的硬度更高一些，HRC≤28，具有良好的防锈及防腐性
- 301不锈钢工业管：延展性好，用于成型产品。也可通过机械加工使其迅速硬化。焊接性好。抗磨性和疲劳强度优于304不锈钢。
- 202不锈钢工业管：属于铬-镍-锰 奥氏体不锈钢，性能优于201不锈钢

201不锈钢工业管：属于铬-镍-锰 奥氏体不锈钢，磁性比较低

410不锈钢工业管：属于马氏体（高强度铬钢），耐磨性好，抗腐蚀性较差。

420不锈钢工业管：“刀具级”马氏体钢，类似布氏高铬钢这种最早的不锈钢。也用于外科手术刀具，可以做的非常光亮。

430不锈钢工业管：铁素体不锈钢，装饰用，例如用于汽车饰品。良好的成型性，但耐温性和抗腐蚀性要差



304L stainless steel industrial pipe: As a low-carbon 304 steel, in general, its corrosion resistance is similar to that of 304, but after welding or stress relief, its resistance to intergranular corrosion is excellent. It can also be used without heat treatment. Maintain good corrosion resistance.

304 stainless steel industrial pipe: has good corrosion resistance, heat resistance, low temperature strength and mechanical properties, good hot workability such as stamping, bending, and no heat treatment hardening. Uses: tableware, cabinets, boilers, auto parts, medical appliances, building materials, food industry (use temperature -196°C - 700°C)

The main features of 310 stainless steel industrial pipe are: high temperature resistance, generally used in boilers, automobile exhaust pipes. Other properties are general.

303 stainless steel industrial pipe: By adding a small amount of sulfur and phosphorus, it is easier to cut than 304, and other properties are similar to 304.



302 stainless steel industrial pipe: 302 stainless steel rod is widely used in auto parts, aviation and aerospace hardware tools, and chemicals. The details are as follows: handicrafts, bearings, sliding flowers, medical equipment, electrical appliances, etc. Features: 302 stainless steel ball belongs to austenitic steel, which is close to 304, but the hardness of 302 is higher, $HRC \leq 28$, and it has good rust and corrosion resistance.

301 stainless steel industrial pipe: good ductility, used for forming products. It can also be hardened by mechanical processing. Good weldability. Abrasion resistance and fatigue strength are better than 304 stainless steel.

202 stainless steel industrial pipe: belongs to chromium-nickel-manganese austenitic stainless steel, with better performance than 201 stainless steel

201 stainless steel industrial pipe: belongs to chromium-nickel-manganese austenitic stainless steel with relatively low magnetic properties

410 stainless steel industrial pipe: belongs to martensite (high-strength chromium steel), with good wear resistance and poor corrosion resistance.

420 stainless steel industrial pipe: "cutting tool grade" martensitic steel, similar to the earliest stainless steel such as Brinell high chromium steel. It is also used for surgical knives, which can be very bright.

430 stainless steel industrial pipe: ferritic stainless steel, for decoration, such as car accessories. Good formability, but poor temperature resistance and corrosion resistance



不锈钢毛细管 (Stainless Steel Capillary Tube)

不锈钢毛细管是指在空气中或化学腐蚀介质中能够抵抗腐蚀的一种高合金钢，具有美观的表面和耐腐蚀性能好，不必经过镀色等表面处理，而发挥不锈钢所固有的表面性能,使用于多方面的钢铁的一种。

Stainless steel capillary refers to a kind of high alloy steel that can resist corrosion in the air or in chemical corrosive media. It has beautiful surface and good corrosion resistance. It does not need to undergo surface treatment such as coloring, and exerts the inherent surface properties of stainless steel. It is a kind of steel in many aspects.

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|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢毛细管 (Stainless Steel Capillary Tube) |
| 厚度 (Thickness) | 0.12-1.8mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 6000mm 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 0.2-13mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/201/304L/316/316L |
| 技术 (Technique) | 冷轧, 热轧 (Cold rolled, Hot rolled) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

不锈钢毛细管用途： 自动化仪表信号管、自动化仪表电线保护管；精密光学尺线路、工业传感器、电子设备线路保护管；电器线路的安全防护、热工仪表毛细管的防护及空芯高压光缆的内支撑。

不锈钢毛细管特性： 具有良好的柔软性、耐蚀性、耐高温、耐磨损、抗拉性、防水性并提供优良的电磁屏蔽性能。不锈钢软管能自由地弯曲成各种角度和曲率半径，在各个方向上均有同样的柔软性和耐久性；不锈钢软管节距之间灵活，有较好的伸缩性，无阻塞和僵硬现象；不锈钢穿线软管各节边扣之间具有一定的抗拉力，以防软管的破坏导致软管内部铺设的线路暴露在外，轴向拉力能承受公称内径的6倍以上。

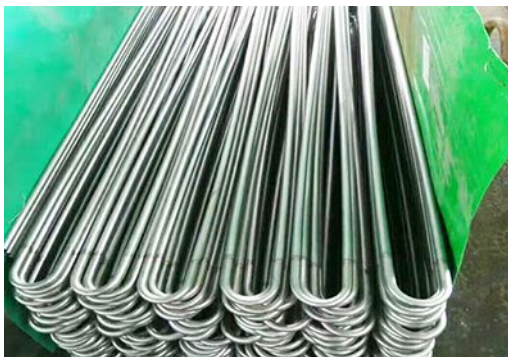
毛细管作为一种原材料被广泛应用于化工、石油、电子、饰品、医疗、航天、空调、医疗设备、厨房用具、制药、供水设备、食品机械、发电、锅炉等各个领域。具体举例如下： 1):医疗器械行业，注射针管，穿刺针管，医疗用工业管。2):工业电热管，工业油管3):感温器导温管，传感器用管，烧烤搓管，温度计管，温控器管，仪器仪表管，温度计器不锈钢管。4):制笔业笔管，护芯管，钢笔管。5):各种电子微型管，光纤配件，光混合器，小直径不锈钢毛细管6):钟表业，子母通，生耳杆，手表带配件，珠宝打孔针7):各种天线用管，汽车尾天线管，拉杆天线用管，拉伸教鞭，手机拉伸天线管，微型天线管，手提电脑天线，不锈钢天线。8):激光雕刻设备用不锈钢管。9):鱼具用管，掉鱼杆管10): 各种饮食工业用管，输料用管。

Uses of stainless steel capillary tube: automatic instrument signal tube, automatic instrument wire protection tube; precision optical scale circuit, industrial sensor, electronic equipment circuit protection tube; electrical circuit safety protection, thermal instrument capillary protection and hollow core high-voltage optical cable internal support.



Characteristics of stainless steel capillary: It has good flexibility, corrosion resistance, high temperature resistance, abrasion resistance, tensile resistance, water resistance and provides excellent electromagnetic shielding performance. The stainless steel hose can be freely bent into various angles and curvature radii, and has the same flexibility and durability in all directions; the stainless steel hose has flexible pitches, good flexibility, and no blockage and stiffness. ; There is a certain degree of tensile strength between the side buckles of the stainless steel threaded hose to prevent the damage of the hose from exposing the lines laid inside the hose, and the axial tension can withstand more than 6 times the nominal inner diameter.

As a raw material, capillary tubes are widely used in various fields such as chemical industry, petroleum, electronics, accessories, medical treatment, aerospace, air conditioning, medical equipment, kitchen utensils, pharmaceuticals, water supply equipment, food machinery, power generation, boilers and so on. Specific examples are as follows: 1): Medical equipment industry, injection needle tube, puncture needle tube, medical industrial tube. 2): Industrial electric heating tube, industrial oil tube 3): Thermostat tube, sensor tube, barbecue tube, thermometer Tubes, thermostat tubes, instrumentation tubes, stainless steel tubes for thermometers. 4): Pen tube, core protection tube, pen tube in the pen industry. 5): Various electronic microtubes, optical fiber accessories, optical mixers, small diameter stainless steel capillary tubes 6): Watch industry, mother-in-one communication, ear rods, watch band accessories, jewelry punching needles 7): Various antenna tubes , Car tail antenna tube, whip antenna tube, stretch pointer, mobile phone stretch antenna tube, miniature antenna tube, laptop antenna, stainless steel antenna. 8): Stainless steel tube for laser engraving equipment. 9): Fishing equipment tube, fishing rod tube 10): Various catering industry tubes and feeding tubes.



不锈钢卷管 (Stainless Steel Coil Tube)

不锈钢卷管，一般为直径0.5cm至20mm，厚度0.1cm至2.0mm的盘装或蚊香装弯管；广泛应用于化工，机械，电子，电力，纺织，橡胶，食品，医疗器材，航空，航天，通信，石油等工业领域。

Stainless steel coiled tube, generally 0.5cm to 20mm in diameter, and thickness 0.1cm to 2.0mm in coiled or mosquito-repellent coiled elbows; widely used in chemicals, machinery, electronics, electricity, textiles, rubber, food, medical equipment, aviation, aerospace, Communications, petroleum and other industrial fields.

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|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢卷管 (Stainless Steel Coil Tube) |
| 厚度 (Thickness) | 0.3mm-3mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 3m-6m 或根据客户要求 (or as per customer request) |
| 外径 (Outer Diameter) | 0.05-20mm 或根据客户要求 (or as per customer request) |
| 公差 (Tolerance) | 外径: +/- 0.2mm 厚度: +/- 10%或根据客户要求 长度: +/- 10mm (Outer Diameter: +/- 0.2mm,Thickness: +/- 10% or as customer request, Length: +/- 10mm) |
| 标准 (Standard) | ASTM, AiSi, DIN, EN, GB, JIS |
| 材料等级 (Material Grade) | 304/201/304L/316/316L |
| 技术 (Technique) | 热轧, 冷轧 (Hot rolled/Cold rolled) |
| 表面处理 (Surface Treatment) | 抛光, 镜面表面, 光亮, 酸洗 (Polishing, Mirro surface, Bright, Pickling) |

不锈钢工业管、超长盘管、U型管、压力管、换热管、流体管、螺旋盘管产品特点：耐高温蒸汽、抗冲击腐蚀、耐氨腐蚀；抗结垢、不容易沾污、抗氧化腐蚀；使用寿命长、减少维修保养时间，节省费用；装管工艺性好、可直接换管，安全可靠；管壁均匀、壁厚只有铜管的50-70%，总体导热系数优于铜管；是老机组改造和制造新设备的理想换热产品。在石油化工、电力、核工业、医药、食品等行业可广泛使用。

Stainless steel industrial pipes, super long coils, U-shaped pipes, pressure pipes, heat exchange tubes, fluid pipes, spiral coils Product features: high temperature steam resistance, impact corrosion resistance, ammonia corrosion resistance; anti-scaling, not easy to stain, Anti-oxidation and corrosion; long service life, reducing maintenance time, saving costs; good pipe installation technology, direct pipe replacement, safe and reliable; uniform pipe wall, wall thickness only 50-70% of copper pipe, overall thermal conductivity better than Copper tube; it is an ideal heat exchange product for the transformation of old units and the manufacture of new equipment. It can be widely used in petrochemical, electric power, nuclear industry, medicine, food and other industries.

工业用不锈钢盘管：热交换器、锅炉、石油、化工、化肥、化纤、制药、核电等。

流体用不锈钢盘管：饮料、啤酒、牛奶、供水系统、医药设备等。

机械结构用不锈钢盘管：印染、印刷、纺织机械、医疗器械、厨房设备、汽车与船舶配件、建筑与装饰等。

不锈钢光亮盘管：由不锈钢带焊接好再减壁，减壁由厚到薄，此过程可以使壁厚均匀，光滑，并且减壁拉伸管壁形成了无焊缝的效果。按照肉眼看是无缝管，但是其工艺决定是焊管。减壁的过程中伴随光亮退火，使内外壁不会形成氧化层，内外光亮，美观，这真是医用产品所需要的。下道工序需要定径，即大拉小工艺，确定外径，外径

Industrial stainless steel coils: heat exchangers, boilers, petroleum, chemicals, fertilizers, chemical fibers, pharmaceuticals, nuclear power, etc.

Stainless steel coils for fluids: beverages, beer, milk, water supply systems, medical equipment, etc.

Stainless steel coils for mechanical structures: printing and dyeing, printing, textile machinery, medical equipment, kitchen equipment, automobile and ship accessories, construction and decoration, etc.

Bright stainless steel coil: welded with stainless steel strips, then reduce the wall, reducing the wall thickness from thick to thin. This process can make the wall thickness uniform and smooth, and the reduced-wall stretched tube wall forms a weld-free effect. According to the naked eye, it is a seamless pipe, but its process is determined to be a welded pipe. The process of reducing the wall is accompanied by bright annealing, so that the inner and outer walls will not form an oxide layer, and the inner and outer walls are bright and beautiful, which is really needed for medical products. The next process requires sizing, that is, large and small processes, to determine the outer diameter, the outer diameter tolerance can generally reach plus or minus 0.01mm.





不锈钢管件 (Stainless Steel Pipe Fittings)

不锈钢管件属于管件的一种，是各种不锈钢材质管路连接工件的统称具有便于安装，性能高，耐用等特点，在各种管路建设与安装中有广泛的应用。不锈钢管件可以分为，不锈钢法兰，不锈钢弯头，不锈钢异径管，不锈钢三通，不锈钢四通等。

Stainless steel pipe fittings are a kind of pipe fittings. They are the collective name of various stainless steel pipe connection parts. They have the characteristics of easy installation, high performance, and durability. They are widely used in various pipeline construction and installation. Stainless steel pipe fittings can be divided into stainless steel flanges, stainless steel elbows, stainless steel reducers, stainless steel tees, stainless steel crosses and so on.



不锈钢法兰 (Stainless Steel Flange)

不锈钢法兰又叫法兰盘或突缘。法兰是使管子与管子相互连接的零件，连接于管端。法兰上有孔眼，螺栓使两法兰紧连。法兰间用衬垫密封。法兰分螺纹连接（丝接）法兰和焊接法兰。

法兰是一种盘状零件，在管道工程中最常见，法兰都是成对及与阀门上的配套法兰使用的。在管道工程中，法兰主要用于管道的连接。在需要连接的管道，各种安装一片法兰盘，低压管道可以使用丝接法兰，4公斤以上压力的使用焊接法兰。两片法兰盘之间加上密封垫，然后用螺栓紧固。不同压力的法兰有不同的厚度和使用不同的螺栓。

Stainless steel flanges are also called flanges or flanges. The flange is a part that connects the pipe and the pipe to each other, and is connected to the pipe end. There are holes on the flanges, and bolts make the two flanges tightly connected. The flanges are sealed with gaskets. The flange is divided into threaded connection (wire connection) flange and welding flange.

Flange is a disc-shaped part, which is the most common in pipeline engineering. Flanges are used in pairs and matching flanges on valves. In pipeline engineering, flanges are mainly used for pipeline connection. In the pipelines that need to be connected, a flange plate is installed in various ways. The low-pressure pipeline can use the wire connection flange, and the welding flange is used for the pressure above 4 kg. A gasket is added between the two flanges and then tightened with bolts. Flanges with different pressures have different thicknesses and use different bolts.



不锈钢弯头 (Stainless Steel Elbow)

不锈钢弯头区别于碳钢弯头的主要是材质的不同，其所含的化学成分会保持弯头表面长时间不会生锈，不会被腐蚀。

在管路系统中，弯头是改变管路方向的管件。按角度分，有45°及90°180°三种最常用的，另外根据工程需要还包括60°等其他非正常角度弯头。

不锈钢弯头特性：强度，韧性指标是各种钢中最好的，其最突出的优点是抗腐蚀，在化工造纸等腐蚀性较强的场合就必须使用不锈钢。

The main difference between stainless steel elbows and carbon steel elbows is the difference in material. The chemical composition contained in the elbow will keep the surface of the elbow from rust and corrosion for a long time.

In the pipeline system, the elbow is a pipe fitting that changes the direction of the pipeline. According to the angle, there are three most commonly used ones: 45° and 90°180°. In addition, according to engineering needs, it also includes other abnormal angle elbows such as 60°.

Stainless steel elbow characteristics: strength and toughness indicators are the best among various steels, and its most prominent advantage is corrosion resistance. Stainless steel must be used in highly corrosive occasions such as chemical papermaking.



不锈钢异径管 (Stainless Steel Reducer)

不锈钢异径管又称不锈钢大小头。化工管件之一，用于两种不同管径的管子的连接。又分为同心大小头和偏心大小头。

圆心在一条直线上的大小头叫做同心大小头。通常采用的成形工艺为缩径压制、扩径压制或缩径加扩径压制，对某些规格的异径管也可采用冲压成形。

偏心大小头指圆心不在同一条直线上的大小头。其作用是贴墙或者贴地走管线而不占用空间，而且是连接两个不同口径的管道，改变流量的大小。

Stainless steel reducer is also called stainless steel size head. One of the chemical pipe fittings, used to connect two pipes with different diameters. It is divided into concentric size head and eccentric size head.

The size head with the center of the circle on a straight line is called the concentric size head. The commonly used forming process is reducing diameter pressing, expanding diameter pressing or reducing diameter plus expanding diameter pressing, and stamping forming can also be used for reducing diameter pipes of certain specifications.

The eccentric size head refers to the size head whose circle center is not on the same straight line. Its function is to stick the pipeline to the wall or to the ground without occupying space, and it is to connect two pipes of different diameters to change the size of the flow.

不锈钢三通为管件、管道连接件。用在主管道要分支管处。不锈钢三通有等径和异径之分，等径三通的接管端部均为相同的尺寸；异径的三通的主管接管尺寸相同，而支管的接管尺寸小于主管的接管尺寸。

对于采用无缝管制造三通来讲，通常所采用的工艺有液压胀形和热压成形两种。不锈钢三通的液压胀形是通过金属材料的轴向补偿胀出支管的一种成形工艺。其过程是采用专用液压机，将与三通直径相等的管坯内注入液体，通过液压机的两个水平侧缸同步对中运动挤压管坯，管坯受挤压后体积变小，管坯内的液体随管坯体积变小而压力升高，当达到不锈钢三通支管胀出所需要的压力时，金属材料在侧缸和管坯内液体压力的双重作用下沿模具内腔流动而胀出支管。



不锈钢三通 (Stainless Steel Tee)

锈钢三通的液压胀形工艺可一次成形，生产效率较高；不锈钢三通的主管及肩部壁厚均有增加。

Stainless steel tees are pipe fittings and pipe connectors. Used in the branch pipe of the main pipeline. Stainless steel tees are divided into equal diameters and reducing diameters. The connecting ends of equal diameter tees are all the same size; the main pipe connecting size of reducing tees is the same, while the connecting pipe size of branch pipes is smaller than that of the main pipe.

For the manufacture of tee joints with seamless tubes, the usual processes used are hydraulic bulging and hot press forming. The hydraulic bulging of the stainless steel tee is a forming process in which the branch pipe is expanded by the axial compensation of the metal material. The process is to use a special hydraulic press to inject liquid into the tube blank with the same diameter as the tee, and to squeeze the tube blank through the synchronous centering movement of the two horizontal side cylinders of the hydraulic press. The volume of the tube blank becomes smaller after being squeezed. The pressure of the liquid increases as the volume of the tube becomes smaller. When the pressure required for the expansion of the stainless steel three-way branch tube is reached, the metal material flows along the inner cavity of the mold under the dual action of the side cylinder and the liquid pressure in the tube to expand the branch tube.

The hydraulic bulging process of the stainless steel tee can be formed at one time, and the production efficiency is high; the wall thickness of the main pipe and the shoulder of the stainless steel tee are increased.



不锈钢四通 (Stainless Steel Cross Fitting)

不锈钢四通，指的是一种用不锈钢做的水管接头，是用于管道分支处的一种管件。

不锈钢四通有等径和异径之分，等径四通的接管端部均为相同的尺寸；异径的四通的主管接管尺寸相同，而支管的接管尺寸小于主管的接管尺寸。对于采用无缝管制造四通来讲，目前通常所采用的工艺有液压胀形和热压成形两种

Stainless steel cross refers to a water pipe joint made of stainless steel, which is a type of pipe fitting used at the branch of the pipeline.

Stainless steel crosses are divided into equal diameters and reducing diameters. The ends of the equal diameter crosses are all the same size; the main pipes of the reducing crosses have the same size, but the branch pipes are smaller than the main pipes. For the use of seamless pipes to manufacture crosses, the currently commonly used processes include hydraulic bulging and hot press forming.

不锈钢卷

Stainless Steel Coil

不锈钢是不锈钢耐酸钢的简称，耐空气、蒸汽、水等弱腐蚀介质或具有不锈钢性的钢种称为不锈钢。不锈钢卷包含 301 不锈钢卷，303 不锈钢卷，304L 不锈钢卷，304/2B 不锈钢卷。不锈钢卷分为热轧不锈钢卷，冷轧不锈钢卷。

Stainless steel is the abbreviation of stainless and acid-resistant steel. Steels that are resistant to weak corrosive media such as air, steam, and water or have rust resistance are called stainless steels. Stainless steel coils include 301 stainless steel coils, 303 stainless steel coils, 304L stainless steel coils, and 304/2B stainless steel coils. Stainless steel coils are divided into hot-rolled stainless steel coils and cold-rolled stainless steel coils.

| | |
|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢卷 (Stainless Steel Coil) |
| 厚度 (Thickness) | 0.1-300mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 根据客户要求 (or as per customer request) |
| 宽度 (Width) | 根据客户要求 (or as per customer request) |
| 表面处理 (Surface Treatment) | 2B 或根据客户要求 (or as per customer request) |
| 标准 (Standard) | AISI, ASTM, DIN, JIS, GB, JIS, SUS, EN 等 (etc) |
| 材料等级 (Material Grade) | 201、202、301、302、303、304、304L, 304H 等 (etc) |
| 技术 (Technique) | 冷轧，热轧 (Cold Rolled,Hot Rolled) |
| 应用 (Application) | 食品，天然气，冶金，生物，电子，化工，石油，锅炉，核能，医疗，设备，化肥等 (Foodstuff, gas, metallurgy, biology, electron, chemical, petroleum, boiler, nuclear energy Medical,equipment, fertilizer, etc) |

冷轧不锈钢卷 (Cold Rolled Stainless Steel Coil)

冷轧不锈钢是指冷轧钢卷，就是经过冷轧生产的钢卷。

冷轧是在室温条件下将No.1钢板进一步轧薄至为目标厚度的钢卷。和热轧钢板比较，冷轧钢卷厚度更加精确，而且表面光滑、漂亮，同时还具有各种优越的机械性能，特别是加工性能方面。因为冷轧原卷比较脆硬，不太适合加工，所以通常情况下冷轧钢板要求经过退火、酸洗及表面平整之后才交给客户。冷轧最大厚度是0.1--8.0MM以下，如大部份工厂冷轧钢板厚度是4.5MM以下；最少厚度、宽度是根据各工厂的设备能力和市场需求而决定。

不锈钢冷轧钢卷是用冷轧工艺生产的不锈钢钢卷，厚度不大于3mm的为薄板，厚度大于3mm的为厚板。用于制作耐腐蚀部件，石油、化工的管道、容器、医疗器械、船舶设备等。

Cold rolled stainless steel refers to cold rolled steel coils, which are steel coils produced by cold rolling.

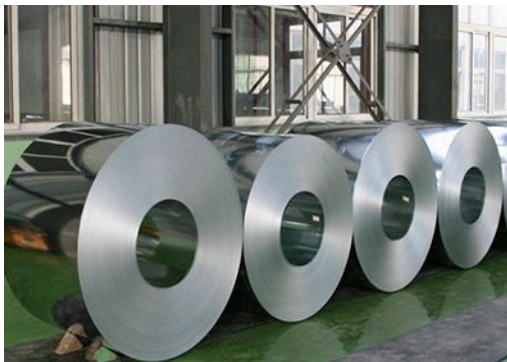
Cold rolling is to further roll the No. 1 steel sheet to a target thickness under room temperature conditions. Compared with hot-rolled steel sheets, cold-rolled steel coils are more accurate in thickness, and have smooth and beautiful surfaces. At the same time, they also have various superior mechanical properties, especially in terms of processing properties. Because cold-rolled raw coils are relatively brittle and hard, and not suitable for processing, cold-rolled steel sheets are usually required to be annealed, pickled and surface smoothed before being delivered to customers. The maximum thickness of cold-rolled is 0.1-8.0mm or less. For example, the thickness



热轧不锈钢卷 (Hot Rolled Stainless Steel Coil)

热轧不锈钢卷是厚度不大于3mm的为薄板，厚度大于3mm的为厚板用于化工、石油、机械、船舶等行业制造耐蚀零件、容器和设备。

Hot-rolled stainless steel coils are thin plates with a thickness of no more than 3mm, and thick plates with a thickness of more than 3mm, which are used in the chemical, petroleum, machinery, shipbuilding and other industries to manufacture corrosion-resistant parts, containers and equipment.

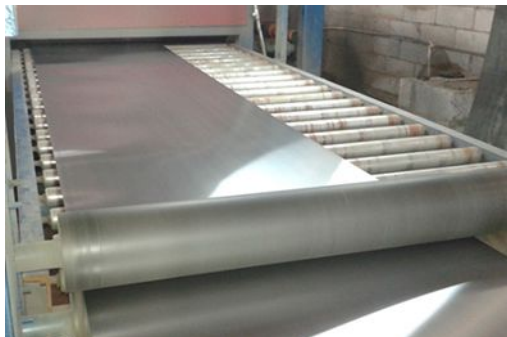
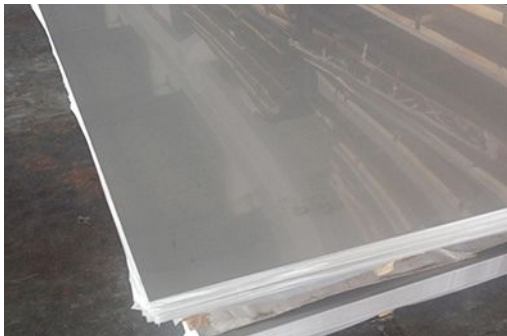


不锈钢薄板

Stainless Steel Sheet

不锈钢板表面光洁，有较高的可塑性、韧性和机械强度，耐酸、碱性气体、溶液和其他介质的腐蚀。它是一种不容易生锈的合金钢，但不是绝对不生锈。厚度在0.2mm-4mm是指不锈钢薄板。

The stainless steel plate has a smooth surface, high plasticity, toughness and mechanical strength, and is resistant to corrosion by acids, alkaline gases, solutions and other media. It is an alloy steel that is not easy to rust, but it is not absolutely rust-free. The thickness of 0.2mm-4mm refers to stainless steel sheet.



不锈钢板具有与不稳定的镍铬合金304相似的抵挡一般腐蚀的能力。在碳化铬程度的温度范围中的长时间加热可能会影响合金321和347在恶劣的腐蚀介质中的。主要用于高温应用，高温应用要求材料有强的抗敏化性，以防止在较低温度的粒间腐蚀。也具有高温抗氧化性，但是，氧化率会受暴露环境以及产品形态等固有因素的影响。

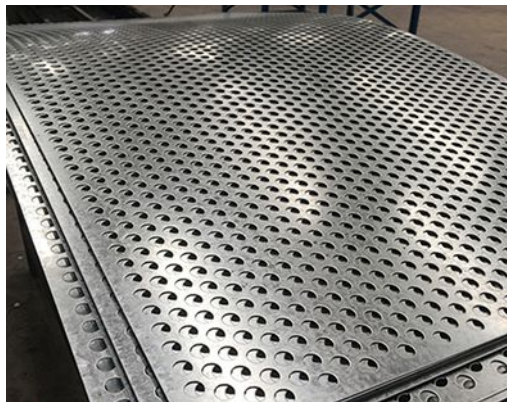
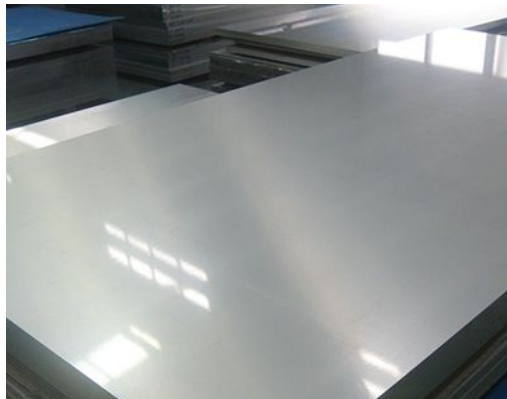
The stainless steel plate has the ability to resist general corrosion similar to the unstable nickel-chromium alloy 304. Long-term heating in the temperature range of chromium carbide may affect alloys 321 and 347 in harsh corrosive media. Mainly used in high temperature applications. High temperature applications require materials to have strong sensitization resistance to prevent intergranular corrosion at lower temperatures. It also has high temperature oxidation resistance, but the oxidation rate will be affected by inherent factors such as exposure environment and product form.

| | |
|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢薄板 (Stainless Steel Sheet) |
| 厚度 (Thickness) | 0.2-4mm |
| 长度 (Length) | 根据客户要求 (or as per customer request) |
| 宽度 (Width) | 根据客户要求 (or as per customer request) |
| 表面处理 (Surface Treatment) | 2B 或根据客户要求 (or as per customer request) |
| 标准 (Standard) | AISI, ASTM, DIN, JIS, GB, JIS, SUS, EN 等 (etc) |
| 材料等级 (Material Grade) | 201、202、301、302、303、304、304L, 304H 等 (etc) |
| 技术 (Technique) | 冷轧, 热轧 (Cold Rolled,Hot Rolled) |
| 应用 (Application) | 建筑, 装修, 厨具, 医疗设备, 石油等 (Construction, Decoration,Kitchenware,Medical Equipment, Petroleum,etc) |

不锈钢平板 (Stainless Steel Plain Sheet/Plate)

不锈钢平板分为不锈钢冲孔板，不锈钢冷轧平板，不锈钢热轧平板三类。

Stainless steel plain plates are divided into stainless steel punching plates, stainless steel cold-rolled flat plates, and stainless steel hot-rolled flat plates.





不锈钢冲孔板 Stainless Steel Perforated

不锈钢冲孔板是指用不锈钢的材质制成的冲孔网板。采用不锈钢制作的冲孔板的优势有很多，最主要的优势是：网面平整，光滑，美观，坚固耐用，有广泛的用途。

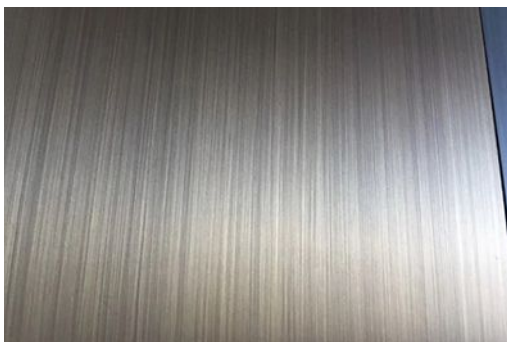
用途：用于土木建筑、用于机械设备的防护、用于工艺品制造、用于高档音箱网罩、用于粮食的通风散热、用于桥梁作钢筋用。

Stainless steel punching plate refers to a punching mesh plate made of stainless steel. There are many advantages of punching plates made of stainless steel. The main advantage is: the mesh surface is flat, smooth, beautiful, durable, and has a wide range of uses.

Uses: used for civil construction, for protection of mechanical equipment, for the manufacture of handicrafts, for high-end speaker grilles, for food ventilation and heat dissipation, and for bridges as steel bars.



不锈钢冷轧平板 Cold Rolled Stainless Steel Sheet



不锈钢冷轧钢板是用冷轧工艺生产的不锈钢钢板，厚度不大于3mm的为薄板，厚度大于3mm的为厚板。用于制作耐腐蚀部件，石油、化工的管道、容器、医疗器械、船舶设备等。

Stainless steel cold-rolled steel plate is a stainless steel steel plate produced by cold-rolling process. The thickness is not more than 3mm as a thin plate, and the thickness is greater than 3mm as a thick plate. Used to make corrosion-resistant parts, pipelines, containers, medical equipment, marine equipment, etc. of petroleum and chemical industry.



不锈钢热轧平板 Hot Rolled Stainless Steel Sheet

热轧不锈钢板强度相对较低，表面质量差点（有氧化\光洁度低），但塑性好，一般为中厚板，冷轧板：强度高\硬度高，表面光洁度高，一般为薄板，可以作为冲压用板。

将直发卷经切头、切尾、切边及多道次的矫直、平整等精整线处理后，再切板或重卷，即成为：热轧不锈钢板、平整热轧钢卷、纵切带等产品。热轧精整卷若经酸洗去除氧化皮并涂油后即成热轧酸洗板卷。该产品有局部替代冷轧板的趋向，价格适中，深受广大用户喜爱。

热轧不锈钢板表面光洁，有较高的塑性、韧性和机械强度，耐酸、碱性气体、溶液和其他介质的腐蚀。它是一种不容易生锈的合金钢。

The strength of hot-rolled stainless steel plate is relatively low, and the surface quality is poor (oxidation\low finish), but good plasticity, generally medium-thick plate, cold-rolled plate: high strength\high hardness, high surface finish, generally thin plate, can be used as Stamping board. After the straight hair coil is processed by a finishing line such as head cutting, tail cutting, edge trimming, and multi-pass straightening and leveling, then it is cut or re-coiled to become: hot-rolled stainless steel plate, flattened hot-rolled steel coil, Slitting tape and other products. If the hot-rolled finished coil is pickled to remove the oxide scale and coated with oil, it will become a hot-rolled pickled coil. This product has a tendency to partially replace cold-rolled plates, and the price is moderate, and it is deeply loved by users.

不锈钢冲压件 (Stainless Steel Stamping)

不锈钢冲压件是指用不锈钢材料加工制成的冲压件产品，不锈钢的规格型号各有不同，生产的厂家也各有不同，一般的不锈钢冲压件都是加工生产而成的。

特点：（1）屈服点高、硬度高、冷作硬化效应显著、易出现裂口等缺陷。（2）导热性比普通碳钢差，导致所需变形力大，冲裁力、拉深力大。（3）拉深时塑性变形剧烈硬化，薄板拉深易起皱或掉底。（4）拉深模具易出现粘接瘤现象，导致零件外径严重划伤。（5）拉深时，难以达到预期的形状。

Stainless steel stamping parts refer to stamping products made of stainless steel materials. The specifications and models of stainless steel are different, and the manufacturers are also different. The general stainless steel stamping parts are processed and produced.

Features: (1) High yield point, high hardness, significant cold hardening effect, and cracks and other defects. (2) The thermal conductivity is worse than that of ordinary carbon steel, which leads to the large deformation force, the punching force and the drawing force. (3) The plastic deformation is severely hardened during deep drawing, and the thin plate is easy to wrinkle or fall off during deep drawing. (4) Adhesive tumors are prone to appear in the deep drawing die, causing serious scratches on the outer diameter of the part. (5) It is difficult to achieve the expected shape during deep drawing.



不锈钢切割件 (Stainless Steel Cutting)

不锈钢材料（管材、型材等）虽为难加工材料，但其特性并非十分坚硬，主要是不锈钢的粘附性强，切屑容易粘附在锯片锯齿上，使切削条件恶化，加快锯片变钝的速度，因此归类为难加工材料。

加工不锈钢专用锯片，使用家国家标准高速钨钼合金钢材料生产，特别适用于不锈钢的铣削加工。亦可用于普通钢，铝，铜，塑料等切断，铣槽，剖沟。

加工后断面光洁、使用寿命长、可使用锯片磨齿机研磨后反复使用，节省成本。

Although stainless steel materials (tubes, profiles, etc.) are difficult to machine, their characteristics are not very hard. The main reason is that stainless steel has strong adhesion. Chips are easy to adhere to the saw teeth, which deteriorates cutting conditions and accelerates the dullness of the saw blade. Speed is therefore classified as a difficult-to-process material.

Special saw blades for processing stainless steel are produced using domestic standard high-speed tungsten-molybdenum alloy steel materials, which are especially suitable for milling processing of stainless steel. It can also be used for cutting, milling grooves and slitting grooves of ordinary steel, aluminum, copper, plastics, etc.

After processing, the section is smooth and has a long service life. It can be used repeatedly after grinding with a saw blade grinding machine to save costs.





不锈钢带

Stainless Steel Strip/Band

不锈钢带简单的说就是超薄不锈钢板的延伸物。主要是满足不同工业部门工业化生产各类 金属或机械产品的需要而生产的一种窄而长的钢板。

不锈钢带种类较多，用途广有：201不锈钢带、202不锈钢带、304不锈钢带、301不锈钢带、302不锈钢带、303不锈钢带、316不锈钢带、J4不锈钢带、309S不锈钢带、316L不锈钢带、317L不锈钢带、310S不锈钢带、430不锈钢铁带等。

The stainless steel strip is simply an extension of the ultra-thin stainless steel plate. It is mainly a narrow and long steel plate produced to meet the needs of different industrial sectors for the industrial production of various types of metal or mechanical products.

There are many types of stainless steel belts, which are widely used: 201 stainless steel belt, 202 stainless steel belt, 304 stainless steel belt, 301 stainless steel belt, 302 stainless steel belt, 303 stainless steel belt, 316 stainless steel belt, J4 stainless steel belt, 309S stainless steel belt, 316L stainless steel belt, 317L stainless steel belt, 310S stainless steel belt, 430 stainless steel iron belt, etc.

不锈钢带有国产(进口)不锈钢带：不锈钢卷带、不锈钢弹簧带、不锈钢冲压带、不锈钢精密带、不锈钢镜面带、不锈钢冷轧带、不锈钢热轧带、不锈钢蚀刻带、不锈钢拉伸带、不锈钢抛光带、不锈钢软带、不锈钢硬带、不锈钢中硬带、不锈钢耐高温带等。

Stainless steel with domestic (imported) stainless steel strips: stainless steel coils, stainless steel spring strips, stainless steel stamping strips, stainless steel precision strips, stainless steel mirror strips, stainless steel cold-rolled strips, stainless steel hot-rolled strips, stainless steel etching strips, stainless steel tensile strips, stainless steel Polishing belt, stainless steel soft belt, stainless steel hard belt, stainless steel medium hard belt, stainless steel high temperature resistant belt, etc.

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|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢带 (Stainless Steel Strip/Band) |
| 厚度 (Thickness) | 0.02-4mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 根据客户要求 (or as per customer request) |
| 宽度 (Width) | 3.5-1550mm 或根据客户要求 (or as per customer request) |
| 表面处理 (Surface Treatment) | NO.1 / BA / 2B / NO.4 / 8K / HL |
| 标准 (Standard) | AISI, ASTM, DIN, JIS, GB, JIS, SUS, EN 等 (etc) |
| 材料等级 (Material Grade) | 201、202、301、302、303、304、304L, 304H 等 (etc) |
| 技术 (Technique) | 冷轧, 热轧 (Cold Rolled,Hot Rolled) |
| 应用 (Application) | 建筑 / 外部材料 (屋顶, 墙壁材料) 工业 / 商业 / 住宅 (Building/outside material (roof, wall material) industrial/commercial/residential) |

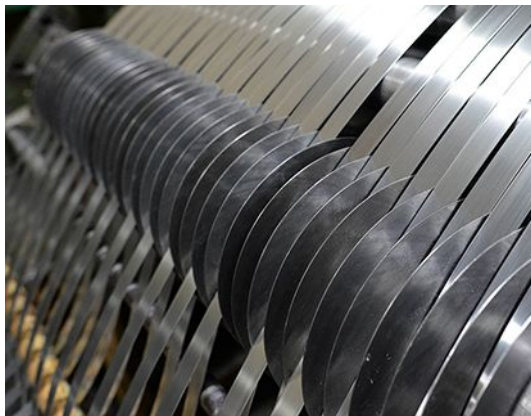
冷轧带:以不锈钢带为原料,在常温下经冷轧机轧制成材。常规厚度0.1mm~3mm,宽度100mm~2000mm;具有表面光洁、平整、尺寸精度高和机械性能好等优点,产品大多成卷,可以加工成涂层钢板。

冷轧不锈钢带生产流程:酸洗→常温轧制→工艺润滑→退火→平整→精切→包装→到达客户手中。

热轧带:经热轧机制成厚度1.80mm-6.00mm,宽度50mm-1200mm的带钢,具有硬度低,加工容易,延展性能好等优点。

热轧不锈钢带生产流程:酸洗→高温轧制→工艺润滑→退火→平整→精切→包装→到达客户手中。

冷轧区别:冷轧钢带强度、屈服比好,热轧钢带延展性、韧性好;冷轧钢带的表面质量、外观、尺寸精度均优于热轧板;冷轧钢带厚度超薄,热轧的厚度较大。



Cold rolled strip: stainless steel strip is used as raw material and rolled into a product by a cold rolling mill at room temperature. The conventional thickness is 0.1mm~3mm, and the width is 100mm~2000mm. It has the advantages of smooth surface, flat surface, high dimensional accuracy and good mechanical properties. Most of the products are in rolls and can be processed into coated steel plates.

The production process of cold-rolled stainless steel strip: pickling→normal temperature rolling→process lubrication→annealing→flattening→precision cutting→packing→arriving to customers.

Hot-rolled strip: It is made into strip steel with a thickness of 1.80mm-6.00mm and a width of 50mm-1200mm through a hot rolling mill. It has the advantages of low hardness, easy processing, and good ductility.

The production process of hot-rolled stainless steel strip: pickling→high temperature rolling→process lubrication→annealing→flattening→precision cutting→packing→arriving to customers.

The difference between cold and hot: cold-rolled steel strip has good strength and yield ratio, hot-rolled steel strip has good ductility and toughness; the surface quality, appearance, and dimensional accuracy of cold-rolled steel strip are better than hot-rolled plates; cold-rolled steel strip has a thickness exceeding Thin, hot-rolled thickness is larger.



不锈钢箔

Stainless Steel Foil

不锈钢箔板材料广泛应用于机械设备制造、电子、电器、电脑、高科技产品零部件、蚀刻用，汽车配件、厨房用品、调整垫片、五金冲压件弹簧弹片，不锈钢箔用来包模等行业领域。

关于超薄钢箔的用途，自然非常广泛，其主要还是用于特殊条件的包覆，适合于金属存在的高强度环境，其制造标准要求非常高，须具备优异的强度、精度及表面光洁度，在航空航天、石油化工、汽车、纺织、电子、家电、计算机和精密机加工等支柱行业中有着广泛的应用。

特殊极薄规格的冷轧不锈钢带钢，厚度一般在0.05—0.5mm之间，0.05mm以下则称为不锈钢箔。

Stainless steel foil material is widely used in machinery and equipment manufacturing, electronics, electrical appliances, computers, high-tech product parts, etching, auto parts, kitchen supplies, adjusting gaskets, metal stamping parts, spring shrapnel, stainless steel foil for overmolding and other industries field.

The use of ultra-thin steel foil is naturally very wide. It is mainly used for coating under special conditions. It is suitable for high-strength environments where metals exist. Its manufacturing standards are very demanding and must have excellent strength, precision and surface finish. It has a wide range of applications in pillar industries such as aerospace, petrochemicals, automobiles, textiles, electronics, home appliances, computers, and precision machining.

Special extremely thin cold-rolled stainless steel strip, the thickness is generally between 0.05–0.5mm, less than 0.05mm is called stainless steel foil.

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|--------------------------|--|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢箔 (Stainless Steel Foil) |
| 厚度 (Thickness) | 0.02-4mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 根据客户要求 (or as per customer request) |
| 宽度 (Width) | 100-650mm 或根据客户要求 (or as per customer request) |
| 表面处理 (Surface Treatment) | BA / 2B / NO.1 / NO.3 / NO.4 / 8K / HL / 2D / 1D |
| 边缘 (Edge) | 磨边 / 切边 (Mill Edge \ Slit Edge) |
| 材料等级 (Material Grade) | 200 系列 / 300 系列 / 400 系列 (series) |
| 技术 (Technique) | 冷轧 (Cold Rolled) |
| 应用 (Application) | 汽车, 石油化工, 电气和 SMT 模具 (automotive, petrochemical , electric and SMT stencils) |

不锈钢箔是最常见，最经济的不锈钢。它们是不可热处理的合金，因此使它们成为热处理零件时工具包裹应用的理想选择。对于高达约1500摄氏度的应用，它具有极强的抗腐蚀和抗热氧化性。它们在退火状态下是非磁性的。

Stainless steel foil is the most common and economical stainless steel on the market. They are non-heat-treatable alloys, making them ideal for tool wrapping applications when heat-treating parts. For applications up to about 1500 degrees Celsius, it has strong corrosion resistance and thermal oxidation resistance. They are non-magnetic in the annealed state.

不锈钢装饰板

Stainless Steel Decorative Board

不锈钢装饰板近年来由于它所具有的独特性，应用越来越广。现在，国外在建筑物上大量采用不锈钢制品做装饰，不锈钢板已经风靡一时。不锈钢既具有金属特有的光泽和强度，又具有色彩纷呈、经久不变的颜色。不锈钢板它不仅保持了原色不锈钢的物理、化学、机械性能，而且比原色不锈钢具有更强的耐腐蚀性能。建材、化工、汽车、电子工业以及工艺美术等领域得到广泛应用。

In recent years, stainless steel decorative panels have become more and more widely used due to its uniqueness. At present, a large number of stainless steel products are used for decoration in buildings abroad, and stainless steel plates have become all the rage. Stainless steel not only has the unique luster and strength of metal, but also has a colorful, long-lasting color. The stainless steel plate not only maintains the physical, chemical and mechanical properties of the primary color stainless steel, but also has stronger corrosion resistance than the primary color stainless steel. It is widely used in the fields of building materials, chemical industry, automobile, electronics industry and arts and crafts.



| | |
|--------------------------|---|
| 项 (Item) | 产品参数 (Product Parameter) |
| 产品名称 (Product Name) | 不锈钢装饰板 (Stainless Steel Decorative Board) |
| 厚度 (Thickness) | 0.1-300mm 或根据客户要求 (or as per customer request) |
| 长度 (Length) | 根据客户要求 (or as per customer request) |
| 宽度 (Width) | 3-2000mm 或根据客户要求 (or as per customer request) |
| 表面处理 (Surface Treatment) | 2B 或根据客户要求 (or as per customer request) |
| 标准 (Standard) | AISI, ASTM, DIN, JIS, GB, JIS, SUS, EN 等 (etc) |
| 材料等级 (Material Grade) | 201、202、301、302、303、304、304L, 304H 等 (etc) |
| 技术 (Technique) | 冷轧, 热轧 (Cold Rolled,Hot Rolled) |
| 应用 (Application) | 它广泛用于高温应用, 医疗设备, 建筑材料, 化学, 食品工业, 农业, 船舶部件 (It is widely used in high temperature applications, medical devices, building materials, chemistry, food industry, agriculture, ship components.) |

不锈钢装饰板按颜色分类：钛黑（黑钛）、天蓝色、钛金、咖啡色、茶色、紫红色、古铜色、玫瑰金、钛白、翠绿、绿色、香槟金、青古铜、粉色、日本金、七彩。

按表面分类：耐指纹板，镀层板，压花板，蚀刻板，拉丝板，磨砂板，镜面板，喷砂板。

Stainless steel decorative panels are classified by color: titanium black (black titanium), sky blue, titanium, brown, brown, fuchsia, bronze, rose gold, titanium white, emerald green, green, champagne gold, green bronze, pink, Japanese gold , Colorful.

Classified by surface: fingerprint resistant board, coated board, embossed board, etching board, drawing board, frosted board, mirror board, sandblasted board.



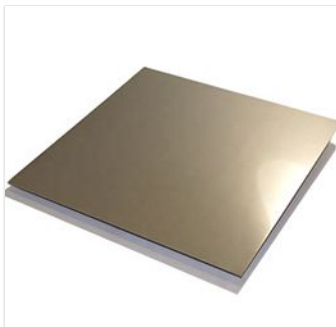
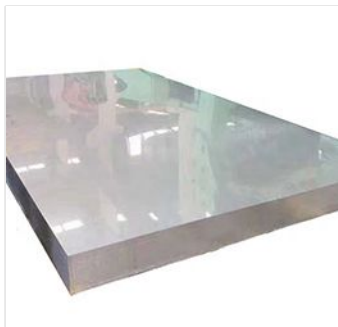
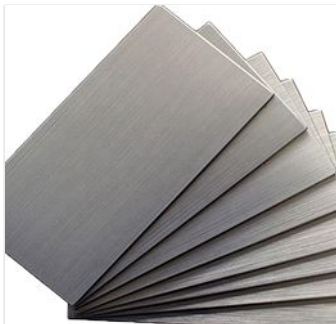
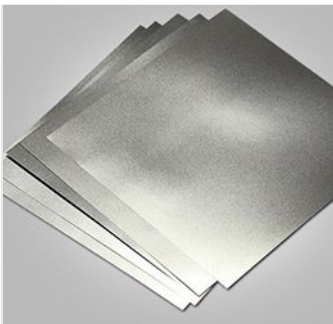
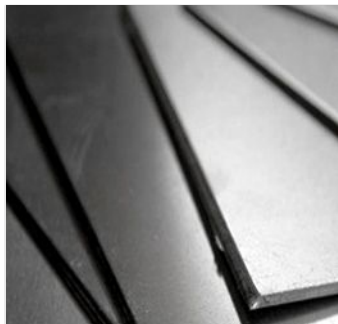
不锈钢耐指纹板 (Anti-fingerprint Stainless Steel Sheet)

无指纹不锈钢技术就是在不锈钢板的表面上涂覆一层特殊涂膜保护层构成，由透明纳米金属滚涂液滚涂烘干而构成与不锈钢板表面牢固结合的透明坚硬固态保护膜，其技术的高低直接影响不锈钢的耐候性，美观性，抗污染性。

特性：国内首创无指纹不锈钢磨砂板技术加工工艺，无指纹不锈钢板的工艺，完全改变不锈钢一贯冰冷呆板的硬伤，具有新颖、环保、耐用、立体感强烈、卫生美观等优点，有效地成为深受消费者喜爱的视觉效果。无指纹其优点是视觉美观、品质优良、易清洁、免维护、抗击、抗压、抗刮痕、及不留手指印。

The fingerprint-free stainless steel technology consists of coating a special coating film protective layer on the surface of the stainless steel plate, which is composed of a transparent nano metal roller coating liquid and roller coating and drying to form a transparent hard solid protective film that is firmly combined with the surface of the stainless steel plate. Its technology The height directly affects the weather resistance, aesthetics and pollution resistance of stainless steel.

Features: The domestic first non-fingerprint stainless steel matte plate technology processing technology, the process of non-fingerprint stainless steel plate, completely change the cold and dull stainless steel flaws, has the advantages of novelty, environmental protection, durability, strong three-dimensionality, hygienic and beautiful, etc., effectively becoming The visual effect loved by consumers. The advantages of no fingerprints are visual beauty, high quality, easy to clean, maintenance-free, anti-strike, anti-pressure, anti-scratch, and no fingerprints.



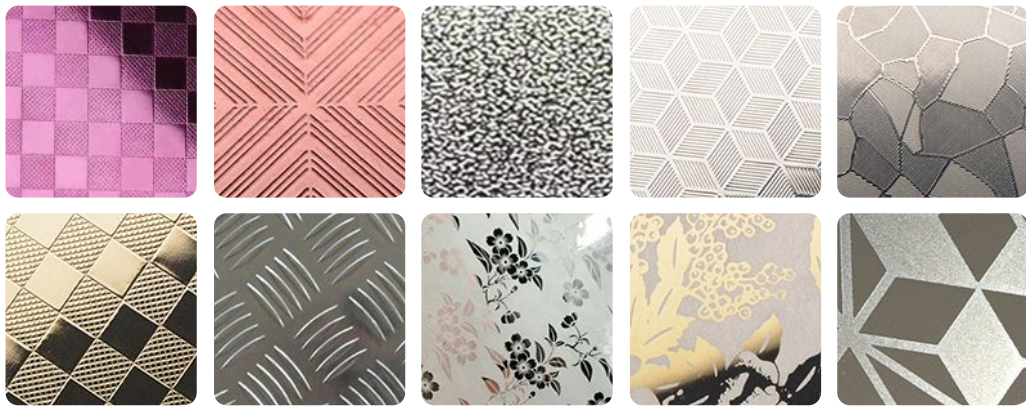
镀层板 (Coating Stainless Steel Sheet)

镀层板中最常用的是镀锌薄板。镀锌板是指表面镀有一层锌的钢板。镀锌是一种经常采用的经济而有效的防腐方法。全世界锌产量的一半左右均用于此种工艺。

镀层板还包括镀锡板（马口铁）、镀铝锌等。

The most commonly used galvanized sheet is galvanized sheet. Galvanized sheet refers to a steel sheet coated with a layer of zinc on the surface. Galvanizing is an economical and effective anti-corrosion method that is often used. About half of the world's zinc production is used in this process.

Coated plate also includes tin plate (tinplate), aluminum zinc plated and so on.



不锈钢压花板 (Embossed Stainless Steel Sheet)

不锈钢压花板是在钢板表面施以凹凸的花纹，用于要求光洁度和观赏性的地方。压花轧制时是用带有图案的工作辊轧制的，其工作辊通常用侵蚀液体加工的，板上的凹凸深度因图案而不同，约为20-30微米。

主要优点:耐看、耐用、耐磨、装饰效果强、视觉美观、品质优良、易清洁、免维护、抗击、抗压、抗刮痕及不留手指印。

适用于装饰电梯轿厢、地铁车厢、各类舱体、建筑装饰装潢、金属幕墙行业使用。



Stainless steel embossed plates are embossed patterns on the surface of steel plates, which are used in places that require smoothness and ornamentation. When embossing is rolled, patterned work rolls are used. The work rolls are usually processed with corrosive liquid. The depth of the unevenness on the plate varies from pattern to pattern, about 20-30 microns.

Main advantages: durable, durable, abrasion-resistant, strong decorative effect. Beautiful visual, good quality, easy to clean, maintenance-free, anti-strike, anti-pressure, anti-scratch and no fingerprints.

It is suitable for use in decorative elevator cars, subway cars, various cabins, architectural decoration and metal curtain wall industries.



不锈钢蚀刻板 (Etched Stainless Steel Sheet)

不锈钢蚀刻板是在不锈钢表面通过化学的方法，腐蚀出各种花纹图案。以8K镜面板、拉丝板、喷砂板为底板，进行蚀刻处理后，对物体表面再进行深加工，不锈钢蚀刻板可进行局部的和纹，拉丝，嵌金，局部钛金等各式复杂工艺处理，不锈钢蚀刻板实现图案明暗相间，色彩绚丽的效果。

工艺流程：不锈钢板→除油→水洗→干燥→丝网印刷→干燥→水浸→蚀刻图纹叶(片)水洗→除墨→水洗→抛光→水洗→着色→水洗叶(片)硬化处理→封闭处理→清洗叶(片)干燥→检验→产品。

Stainless steel etching plates are chemically corroded into various patterns on the surface of stainless steel. With 8K mirror panel, wire drawing board, sandblasting board as the bottom plate, after the etching treatment, the surface of the object is further processed. The stainless steel etching board can be processed with various complex processes such as partial patterning, wire drawing, gold embedding, and partial titanium gold. , The stainless steel etching plate achieves the effect of bright and dark patterns and brilliant colors.

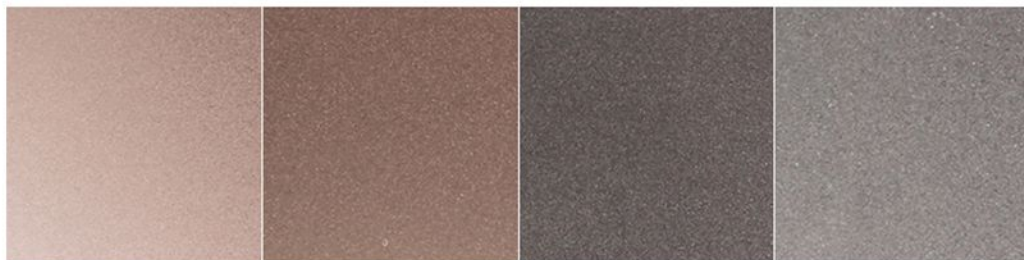
Process flow: stainless steel plate → degreasing → water washing → drying → screen printing → drying → water immersion → etching pattern leaf (sheet) water washing → ink removal → water washing → polishing → water washing → coloring → water washing leaf (sheet) hardening treatment → Sealing treatment → washing leaves (sheets) drying → inspection → product.



不锈钢拉丝板（Hairline Stainless Steel Sheet）

不锈钢拉丝就是不锈钢表面象丝状的纹理，这只是不锈钢的一种加工工艺。表面是亚光的,仔细看上面有一丝一丝的纹理,但是摸不出来.比一般亮面的不锈钢耐磨,看起来更上档次一些。拉丝工艺会在一定程度上损失不锈钢板的厚度，一般在0.1~0.2mm。另外，由于人体尤其是手掌具有比较旺盛的油脂和汗液分泌，不锈钢拉丝板经常用手触摸会留下比较明显的指纹，需定期擦洗。

Brushed stainless steel is a wire-like texture on the surface of stainless steel, which is just a processing technology of stainless steel. The surface is matt, and there is a trace of texture on it carefully, but it can't be felt. It is more wear-resistant than the normal bright surface of stainless steel, and looks a little higher-grade. The wire drawing process will lose the thickness of the stainless steel plate to a certain extent, generally 0.1~0.2mm. In addition, since the human body, especially the palm, has relatively strong oil and sweat secretion, the stainless steel wire drawing board often leaves more obvious fingerprints when touched by hand, and it needs to be scrubbed regularly.



Tan

Bronze

Black

Gray



Rose Gold

Titanium gold

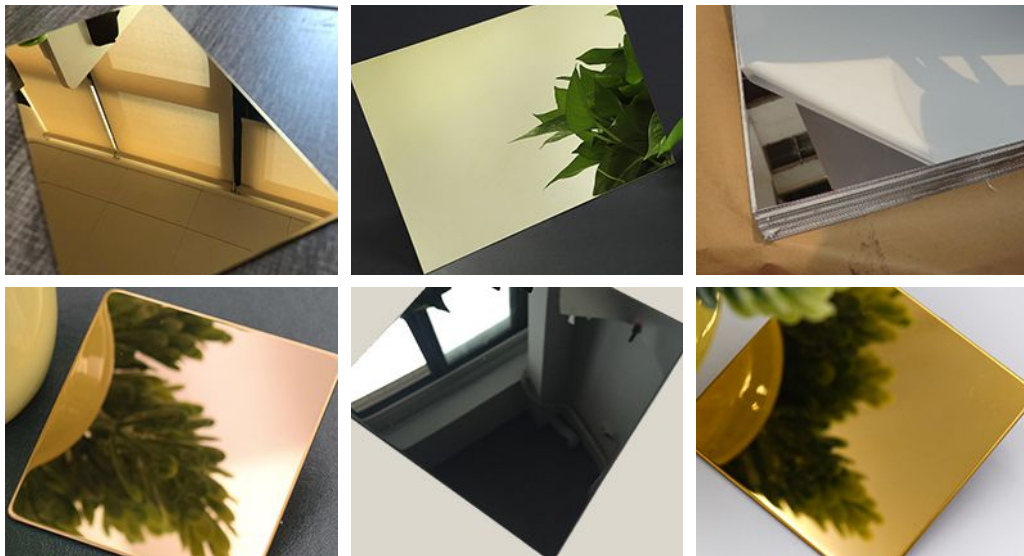
Champagne gold

Brown Gold

不锈钢磨砂板（Matte Finish Stainless Steel Sheet）

磨砂不锈钢薄板是将不锈钢辊打开的平直的延伸部分弄平，然后通过磨床或拉丝机生产的主要产品，表面的拉丝，雪沙等都有晶粒。

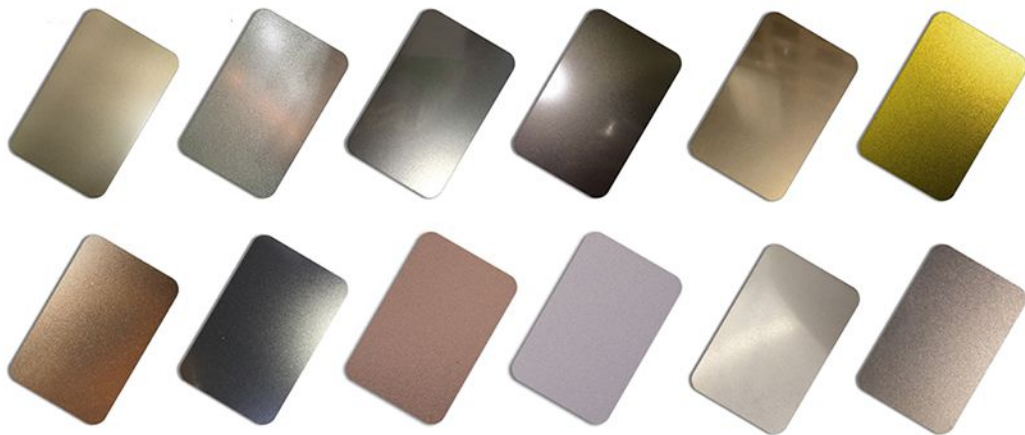
The frosted stainless steel sheet is the main product produced by flattening the straight extension part of the stainless steel roll, and then using a grinder or a wire drawing machine. The wire drawing and snow sand on the surface have crystal grains.



不锈钢镜面板（Mirror Finish Stainless Steel Sheet）

不锈钢镜面板又称镜面板，用研磨液通过抛光设备在不锈钢板面上进行抛光，使板面光度像镜子一样清晰。主要用在建筑装璜，电梯装璜。工业装璜、设施装璜等不锈钢系列产品。316不锈钢镜面板、316L不锈钢镜面板、304不锈钢镜面板、301不锈钢镜面板、201不锈钢镜面板等。

The stainless steel mirror panel is also called the mirror panel. The surface of the stainless steel plate is polished by polishing equipment with a grinding fluid to make the surface brightness as clear as a mirror. Mainly used in building decoration, elevator decoration. Industrial decoration, facility decoration and other stainless steel products. 316 stainless steel mirror panel, 316L stainless steel mirror panel, 304 stainless steel mirror panel, 301 stainless steel mirror panel, 201 stainless steel mirror panel, etc.



不锈钢喷砂板 (Sandblasted Stainless Steel Sheet)

不锈钢喷砂板是不锈钢产品的其中之一产品，此种工艺是用锆珠粒通过机械设备在板面进行加工，使板面呈现细微珠粒状砂面，并经过复杂的工艺过程来实现喷砂板表面。因不锈钢板块表面形态呈现的喷砂状，称其为不锈钢喷砂板。

不锈钢喷砂板可供广大用户选择的有：浅金黄色，金黄色，宝石蓝，黑枪色，咖啡色，幼彩色，锆金色，青铜色，玫瑰色。

Stainless steel sandblasting board is one of the stainless steel products. This process uses zirconium beads to process the surface of the board through mechanical equipment, so that the surface of the board presents a fine bead-like sand surface, and the sandblasting is achieved through a complex process. The surface of the board. Because of the sandblasted surface morphology of the stainless steel plate, it is called a stainless steel sandblasting board.

Stainless steel sandblasting boards are available for the majority of users to choose from: light golden yellow, golden yellow, sapphire blue, black gun color, brown, young color, zirconium gold, bronze, rose.