



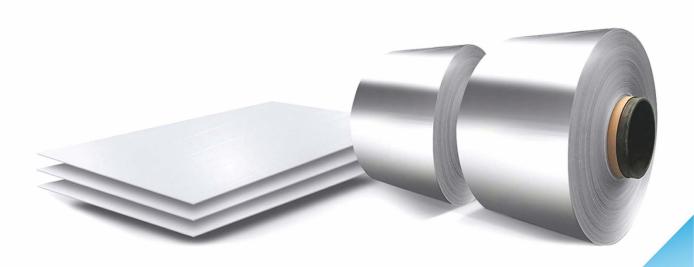






湖南安联金属制品有限公司 HUNAN ALLIANZ METAL PRODUCTS CO., LTD

Integrated Supplier of Stainless Steel Products Focus on Engineering Projects over 26 Years. 专注于工程项目超过26年的不锈钢产品的综合供应商





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Integrated Supplier of Stainless Steel Products Focus on Engineering Projects over 26 Years 专注于工程项目超过26年的不锈钢产品的综合供应商

企业文化 Enterprise Culture

愿景:Vision:

安精神之本,联财富之源

Keep the peace of mental, link the source of wealth.

使命:Mission:

与世界共享中国造, 为客户利益而努力创新

Share made in China with the world and strive to innovate for customers' benefit.

价值观:Values:

激情、敬业、创新、进取、诚信、求实、利他、共赢 Passionate, Dedicated, Innovative, Enterprising, Altruistic, Win-win, Honest, Truth-seeking.

宗旨:Aim:

为客户提供独特价值 Provide unique value for customers.





安聨鋼鐵集团

安聯鋼鐵集团以"与世界共享中国造,为客户利益而努力创新"为使命,通过不断创新业务模式,打造产品品牌,有效地促进了产业发展,深耕钢铁产业、先进材料、先进智造、国际货运、矿业、文化传媒等六大业务板块,是中国知名的综合性钢铁产业集团、世界领先的新材料,开发商和钢材采购综合服务商。截至2020年底,集团资产总额80多亿元,年营业收入40多亿元,员工总数3800余人。

下设十个子公司及海外代表处、五个生产基地、三个研究院,是中国民营企业工业100强、国家技术创新型企业、国家重点高新技术企业、国家绿色示范工厂、全国AAA级质量信用企业、最佳雇主100强企业。

Allianz Steel Gruop

With the mission of "share made in China with the world and strive to innovate for customers' benefit". Allianz Steel Group has effectively promoted the development of the industry by continuously innovating business models and building product brands. It is a well-known comprehensive steel industry group in China, a world-leading developer of new materials and a comprehensive service provider of steel procurement. Group has cultivated six business sectors, including steel industry, advanced materials, advanced manufacturing, international freight, mining and cultural media. By the end of 2020, the Group had total assets of over CNY 8 billion, annual income over CNY 4 billion and over 3,800 employees.

Allianz Steel Group has ten subsidiaries and overseas representative offices, five production bases and three research institutes, and it is one of the top 100 private enterprises in China, a national technical innovation enterprise, a national key high-tech enterprise, a national green demonstration manufacturer, a national AAA-grade quality credit enterprise and a top 100 best employer.

湖南安联金属制品有限公司

湖南安联金属制品有限公司成立于1996年,2014年成立Ronsco商标。湖南安联隶属于安聨鋼鐵集团旗下,专业生产不锈钢板子、卷板、管件、法兰等产品。公司对外提供库存以及相应不锈钢材料的深加工。我们的产品远销国内外,并致力于为全球客户提供不锈钢高端制造以及配套服务。

在素有"星城"之称的湖南长沙,公司设有国际营销部,办公地坐落在美丽的湘江旁。我们在不锈钢产地无锡设有分公司,分公司拥有2.2万平米不锈钢卷板仓库,常备2000吨(包括314、316、316L、2205等)不锈钢卷板库存;18000平米卷板加工厂能提供分卷、分条、开平、裁剪、切割、研磨、成型、坡口、焊接等加工服务。公司严格按照ISO 9001质量管理体系进行现场管理,先后获得ISO 9001、CE、PED认证等,产品得到SGS、BV、LR、TUV、INTERTEK等国际权威第三方机构的检验和认可,是宝武,太钢,青山的重要战略合作伙伴。

湖南安联以 "为客户提供独特价值" 为宗旨,充分发挥本地的不锈钢材料资源优势和强大的加工平台,为各类制造业提供 "一站式"配套服务和问题解决方案,不断拓展产业链,提升自身价值。作为一家在不锈钢领域有26年以上经验的的供应商,公司拥有专业服务团队,能够为客户提供高标准的产品技术支持、准时合格的产品交付、专业的产品运输和清关、可靠的售后等全方位的服务。 未来,湖南安联将继续以全球化视野,进一步深耕不锈钢行业。以技术创新为目标,继续推进信息化、自动化、智能化制造,网络化服务和布局。公司将不断深入行业的细分领域,致力于成为该领域中的标杆,增强服务能力,为社会创造更大价值。

湖南安联始终坚持"以客户为中心"的经营理念,竭尽全力满足客户需求,追求与客户之间的合作双赢。湖南安联是您值得信赖的不锈钢产品一站式供应商!

Hunan Allianz Metal Products Co., Ltd

Hunan Allianz Metal Products Co., LTD, was established in 1996 and the trademark Ronsco was established in 2014. Which is a subsidiary of Allianz Steel Group, specializing in the production of stainless steel plate, plate rolling, pipe fittings and flange etc. It provides inventory and stainless steel processing. Stainless steel products are sold at domestic and overseas, we are committed to providing high-end stainless steel manufacturing and supporting services for global customers.

The company has an international marketing department in Changsha Hunan province, where is known as "Star City" in central China. In stainless steel production area Wuxi, it has a branch, which has 22,000 square meters of stainless steel coil warehouse, with regular stock 2,000 tons (including 314, 316, 316L, 2205, etc.) 18000 square meters of rolling plate processing plant can provide rolling, stripping, flattening, cutting, grinding, molding, beveling, welding and other processing services. The company strictly in accordance with the ISO 9001 quality management system for on-side management ,successively obtained the certification of ISO 9001,CE,PED,etc, its products validated and recognized by SGS, BV, LR, TUV, INTERTEK and other international authoritative third party organizations. Also strategically cooperate with Bao Steel, TiSCO, Qingshan.

Hunan Allianz takes "provide unique value for customers" as the aim, gives full play to the advantages of local stainless steel material resources and powerful processing platform, provides "one-stop" supporting service solutions for various manufacturing industires, continuously expands and extends the industrial chain, and enhances its own value.

As a stainless steel supplier with more than 26 years of experience, we have a professional service team capable of providing high standards of product technical support, timely and qualified product delivery, professional product transportation and customs clearance services, reliable after-sales service and a full range of services.

In the future, Hunan Allianz will continue to deepen its efforts in the stainless steel industry from a global perspective, and continue to promote informatization, automation, intelligent manufacturing, network services and layout with technological innovation. Allianz is committed to becoming an industry benchmark in the subdivision field, enhancing its service capability and creating greater value for the society.

We always adheres to the business philosophy of "customer-centered", tries its best to meet the requirements of customers and pursues win-win cooperation with customers. Allianz is your trustworthy stainless steel products one-stop supplier!



女聯鋼鐵集团





战略发展部

Strategic Development Department

人力资源部

Human Resource Department

财务部

Financial Department

审计部

Audit Department

行政部

Administration Department

风险管控委员会

Risk Management And Control Committee

安聯鋼鐵集团钢铁研究院

Allianz Steel Group Iron and Steel Research Institute

安聨鋼鐵集团智能设备研究院

Allianz Steel Group Intelligent Equipment Institute

安聨鋼鐵集团新材料研究院

Allianz Steel Group New Materials Research Institute

工会

Labour Union

安钢集团有限公司(香港安联) Allianz Metal Group Co.,limited

湖南安联金属制品有限公司 Hunan Allianz Metal Products Co., ltd.

湖南森特威钢铁有限公司 Centerway Steel Co., Ltd

长沙宁优科技有限公司

Changsha Ninyou Technology Co., Ltd.

怀化九源特种锰业有限公司

Huaihua Jiuyuan Special Manganese Industry Co., Ltd.

兴化元焱文化传播有限公司

 $Xinghua\,Yuanyan\,Culture\,Communication\,Co., Ltd.$

战略业务单元 Strategic Business Unit



生产基地 Production Base



集团部室 Group Subsidiray

湖南化工设备及钢管生产基地

Hunan Chemical Equipment And Steel Pipe Production Base

浙江不锈钢生产基地

Zhejiang Stainless Steel Production Base

河北钢管生产及加工基地

Hebei Steel Pipe Production And Processing Base

江苏不锈钢及锻件生产基地

Jiangsu Stainless Steel And Forging Production Base

江苏利卓盈钢材加工仓储有限公司

Jiangsu Lizhuoying Steel Processing And Storage Co., Ltd.

社会责任 Social Responsibility

1

对客户的责任,诚信铸就品牌

Responsible for customers and credit building up brand

安聯鋼鐵集团始终把为客户提供最好的产品、最优的服务、全方位满足不同客户的需求视为企业的第一要务,树立了企业的诚信品牌。

Allianz steel group always takes it as the first importance to supply good products and service for customers to meet varied demands of different customers, which helps building up credit and brand of the group.

2 对员工的责任,用诚信增强凝聚力 Responsible for staff and workers and to consolidate cohesive force

安聯鋼鐵集团始终坚持"以人为本,立人立企"人才观念,大力营造了企业政通人和、劳动关系和谐、职工安居 乐业、忠诚企业、爱岗敬业的良好氛围,保持了企业旺盛的生机和活力,增强了企业的向心力和凝聚力。
Following concept of its "people centered and enterprise development by talents",Allianz Steel Group is striving to generate a good atmosphere for workers to establish a harmonious work relation,where workers can enjoy working and life and loyal to the enterprise. Those measures maintains vigorous life and vitality of the enterprise and consolidates centripetal force and cohesive force of the enterprise.

3 对合作伙伴的责任,诚信推动合作共赢 Responsible for cooperative partners and credit, promoting mutual benefit of cooperation

公司高举"合作、共赢"的旗帜,树立"诚信为本、成就客户"的经营理念,以诚信联盟,步入了快速发展的轨道。 Highly holding banner of cooperation and mutual benefit, with concept of "honesty for the achievement of customers", Allianz Steel Group is moving into track for fast development working together with its partners.

4

对环境的责任,全力创建环境友好型企业

Responsible for environment and becoming an environmental-friendly enterprise

绿色、低碳、环保新常态下企业实现健康持续发展的主题,公司始终坚持经济发展与环境保护并重,紧紧围绕"绿色安钢"环保目标,全力推进资源节约型和环境友好型企业建设,实现环境保护和经济建设的协调发展。 Green, low carbon and environmental protection under the new norm is the theme of the enterprise's healthy development. Allianz Steel Group pays more attention to economic development and environmental protection. The group is pushing forward to build into resources conserving and environmental-friendly enterprise to realize harmonious development in environmental protection and economical construction.

5 对社会的责任,感恩回馈社会,勇担社会责任 Responsible for society, bearing more social responsibility, pay back to the society

致富思源,富而思进,安聨鋼鐵集团在超过26年的创新发展中,始终遵循并积极践行"产业报国、奉献社会"的公司精神,树立起了有责任、敢担当、讲奉献的良好企业形象。

During its more than 26 years development, Allianz Steel Group has build up a good reputation in public in term of social responsibility and contribution with mind of "contributing to the country by developing industry".





1.水工业

水在储运过程中遭受污染的问题已为人们日益重视。大量实践证明,不锈钢卷板是水的准备、贮存、输送、净化、再生、海水淡化等水工业最佳选材。其优点是:耐腐蚀、抗地震、节水、卫生(无铁锈及铜绿色)、重量轻(减轻1/3)、少维修、寿命长(可使用40年)、寿命周期成本(LCC)低、属可回收再利用的绿色环保材料。

1 Water Industry

People have paid more and more attention to the problem of water pollution during storage and transportation. A lot of practice has proved that stainless steel coil is the best material for water industry such as water preparation, storage, transportation, purification, regeneration, and seawater desalination. Its advantages are: corrosion resistance, earthquake resistance, water saving, sanitation (no rust and copper green), light weight (1/3 reduction), less maintenance, long life (40 years of use), low life cycle cost (LCC), It is a green and environmentally friendly material that can be recycled and reused.



2. 车辆/汽车工业

这是当前发展最快的不锈钢卷板应用领域。采用高强度不锈钢卷板制造车体结构可大大降低车辆自重,增强车体结构的强度,用不锈钢卷板做车辆的面板与装饰部件可减少维护成本。此外,不锈钢卷板还因具有抗氯离子腐蚀和耐热的优点而被用于汽车的排气系统。

2. Industry

This is currently the fastest growing application area of stainless steel coils. The use of high-strength stainless steel coils to manufacture the car body structure can greatly reduce the vehicle's own weight and increase the strength of the car body structure. Using stainless steel coils as the vehicle panel and decorative parts can reduce maintenance costs. In addition. the stainless steel coil is also used in the exhaust system of the automobile because of its resistance to chloride ion corrosion and heat resistance.



3. 家电业

在家电业,不锈钢卷板用量大的是自动洗衣机内筒、热水器内胆、微波炉内外壳体、冰箱内衬,且多采用铁素体不锈钢卷板。西欧家用电不锈钢卷板的比例较大,亚洲除日本接近欧洲水平外一般用得较少。

3. Home Appliance Industry

In the home appliance industry, stainless steel coils are mostly used in automatic washing machines, water heaters, microwave ovens, and refrigerator linings, and ferritic stainless steel coils are mostly used. The proportion of stainless steel coils for household appliances in Western Europe is relatively large, and in Asia, except for Japan, which is close to the European level, it is generally used less.





4. 建筑业

目前,它是不锈钢卷板应用最早的领域之一。在建筑装饰方面,不锈钢卷板主要用在高层建筑的外墙、室内及外柱的包覆,扶手、地板、电梯壁板、门窗、幕墙等内外装饰及构件。经表面处理、着色、镀层的不锈钢卷板板,解决了触摸后易出现手印等问题,使不锈钢卷板的应用范围进一步扩大。

4. Construction Industry

It is one of the earliest applications of stainless steel coils. In terms of architectural decoration, at present, stainless steel coils are mainly used for exterior walls, interior and exterior columns of high-rise buildings, handrails, floors, elevator siding, doors and windows, curtain walls and other interior and exterior decoration and components. The surfacetreated, colored, and plated stainless steel coiled plate solves the problem of easy fingerprints after touching, and further expands the scope of application of the stainless steel coiled plate.



5. 环保工业

工业废气、垃圾和污水处理装置需采用不锈钢卷板制造。在烟气脱硫过程中,为抵御二氧化硫及氯离子、铁离子的腐蚀,在吸收塔、冷却器、泵、阀门、烟道等处需要采用双相不锈钢卷板及高牌号奥氏体不锈钢卷板。垃圾焚烧炉、废水处理等设施都需要采用高性能不锈钢卷板材料制作。

5. Environmental Protection Industry

Industrial waste gas, garbage and sewage treatment equipment need to be made of stainless steel coils. In the flue gas desulfurization process, in order to resist the corrosion of sulfur dioxide, chloride ions and iron ions, it is necessary to use duplex stainless steel coils and high-grade austenitic stainless steel coils in absorption towers, coolers, pumps, valves, flues, etc.. Waste incinerators, waste water treatment facilities and other facilities need to be made of high-performance stainless steel coil materials.



6.工业设施

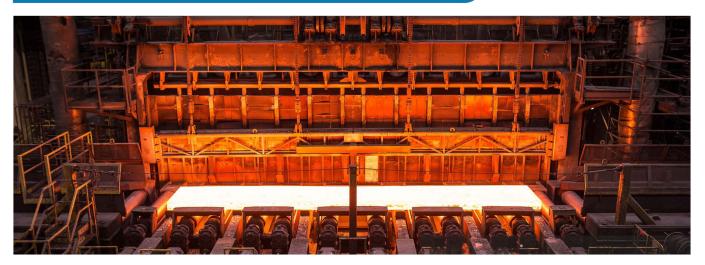
发达国家工业设施采用的不锈钢卷板 比例一般可到15%-20%,化工、石化、 化纤、造纸、食品、医药、能源(核电、 火电、燃料电池)等领域都需要不锈钢 卷板。

6. Industrial Facility

The proportion of stainless steel coils used in industrial facilities in developed countries can generally reach 15%-20%.
Chemical, petrochemical, chemical fiber, paper, food, medicine, energy (nuclear power, thermal power, fuel cells) and other fields require stainless steel coils.



制造工艺 Manufacturing Process



热轧定义/Definition of Hot Rolling

热轧是一种金属加工工艺,其中金属在加工或轧制操作中被加热到再结晶温度以上,使其发生塑性变形。此过程用于创建具有所需几何尺寸和材料特性的形状,同时保持相同的金属体积。

从定义上来说,钢锭或钢坯在常温下很难变形,不易加工,一般加热到1100~1250℃进行轧制,这种轧制工艺叫热轧。热轧的终止温度一般为800~900℃,之后一般在空气中冷却,因而热轧状态相当于正火处理。

大部分钢材都用热轧方法轧制。热轧状态交货的钢材,由于高温的缘故,表面生成一层氧化铁皮,因而具有一定的耐蚀性,可露天存放。但这层氧化铁皮也使热轧钢材表面粗糙,尺寸波动较大,所以要求表面光洁、尺寸精确、力学性能好的钢材,要用热轧半成品或成品为原料再冷轧生产。

Hot rolling is a metalworking process in which metal is heated above the recrystallization temperature to plastically deform it in the working or rolling operation. This process is used to create shapes with the desired geometrical dimensions and material properties while maintaining the same volume of metal. By definition, steel ingots or billets are difficult to deform and process at room temperature. They are generally heated to 1100 to 1250°C for rolling.

This rolling process is called hot rolling. The termination temperature of hot rolling is generally 800 to 900° C, and then it is generally cooled in air, so the hot rolling state is equivalent to normalizing treatment.

Most steel materials are rolled by hot rolling. The steel delivered in the hot-rolled state has a certain degree of corrosion resistance due to the high temperature, so it can be stored in the open air. However, this laver of oxide scale also makes the hot-rolled steel surface rough, and the size fluctuates greatly.

Therefore, the steel with smooth surface, accurate size, and good mechanical properties are required to use hot-rolled semi-finished products or finished products as raw materials and then cold-rolled production.

热轧的优缺点/ Advantages and disadvantages of hot rolling

一般来说,经过过热处理的热轧钢的抗拉强度、屈服强度、塑性和韧性都会得到提高。另外,热处理可以消除残余应力。热轧的优点在于它能破坏铸锭的铸造组织,细化钢的晶粒,消除组织缺陷,使钢组织致密,提高热轧钢的硬度。



Generally speaking, the tensile strength, yield strength, plasticity and toughness of heat-treated hot-rolled steel will be improved. In addition, heat treatment can eliminate residual stress. The advantage of hot rolling is that it can destroy the casting structure of the ingot, refine the grain of the steel, eliminate structural defects, make the steel structure dense, and improve the hardness of the hot rolled steel.

经过热轧之后,钢材内部的非金属夹杂物(主要是硫化物和氧化物,还有硅酸盐)被压成薄片,出现分层现象。另外,不均匀冷却造成的残余应力。



After hot rolling, the non-metallic inclusions (mainly sulfides and oxides, as well as silicates) inside the steel are pressed into thin sheets, and delamination occurs. In addition, residual stress caused by uneven cooling.

7

冷轧定义/Definition of Cold Rolling

冷轧,是指在常温下,用轧辊的压力挤压钢材,改变钢材形状的轧制方法。尽管加工过程也会使钢板升温,但仍然称为冷轧。 具体一点说,冷轧用热轧钢卷为原料,经酸洗去除氧化皮后进行压力加工,其成品为轧硬卷。

一般冷轧钢如镀锌、彩钢板都须退火,所以塑性和延伸率也较好,广泛应用于汽车、家电、五金等行业。冷轧板表面有一定的 光洁度,手摸起来比较光滑,主要是酸洗之功。热轧板一般表面光洁度达不到要求,所以热轧钢带需冷轧,还有热轧钢带厚度最薄 一般在1.0mm,冷轧可达到0.1mm。热轧是结晶温度点以上的轧制,冷轧是结晶温度点以下的轧制。

Cold rolling refers to a rolling process that uses the pressure of rolls to squeeze steel to change the shape of the steel at room temperature. The processing process will also make the steel plate hot rolled, but still cold rolled. Specifically, the hot-rolled steel coil used for cold rolling is used as the raw material, and the skin is removed by pickling and then subjected to pressure processing. The finished product is a hard-rolled coil.

Generally, cold-rolled steel, such as steel manufacturing and color steel plates, require carbon, so the plasticity and elongation also have a certain range. The surface of the cold-rolled sheet has a certain degree of smoothness, and the surface of the cold-rolled sheet has a certain degree of cleanliness, mainly due to pickling. Generally, the surface finish of hot-rolled plates cannot meet the requirements, so hot-rolled steel strips need to be cold-rolled, and the thinnest thickness of hot-rolled steel strips is generally 1.0mm, and cold-rolled can reach 0.1mm. Hot rolling is rolling above the crystallization temperature point, and cold rolling is rolling below the crystallization temperature point.

冷轧的优缺点/Advantages and disadvantages of cold rolling



成型速度快、产量高,且不损伤涂层,可以做成多种多样的截面形式,以适应使用条件的需要;冷轧可以使钢材产生很大的塑性变形,从而提高了钢材的屈服点。

Fast forming speed, high output and the coating is not damaged, and it can be made into a variety of cross-sectional forms to meet the needs of the use conditions; cold rolling can cause large plastic deformation of the steel, thereby increasing the yield point of the steel.



虽然成型过程中没有经过热态塑性压缩,但截面内仍然存在残余应力,对钢材整体和局部屈曲的特性必然产生影响;冷轧型钢样式一般为开口截面,使得截面的自由扭转钢度较低。在受弯时容易出现扭转,受压时容易出现弯扭屈曲,抗扭性能较差;另外,冷轧成型钢壁厚较小,在板件衔接的转角处又没有加厚,承受局部性的集中荷载的能力弱。

Although there is no thermal plastic compression during the forming process, there are still residual stresses in the section, which will inevitably affect the overall and local buckling characteristics of the steel; the cold-rolled section steel generally has an open section, which makes the section's free torsional stiffness low. It is prone to torsion during bending, and it is prone to bending and torsion buckling under compression, and its torsion resistance is poor. In addition, the wall thickness of cold-rolled steel is small, and there is no thickening at the corners where the plates are connected, which bears localized the ability to concentrate loads is weak.

总结/Summary

冷轧与热轧的分别主要是轧制过程的温度。"冷"为常温,"热"为高温。从金属学的观点看,冷轧与热轧的界限应以再结晶温度来区分。即低于再结晶温度的轧制为冷轧,高于再结晶温度的轧制为热轧。钢的再结晶温度为 $450\sim600^{\circ}$ C。

The main difference between cold rolling and hot rolling is the temperature of the rolling process. "Cold" means normal temperature, and "hot" means high temperature.

From a metallurgical point of view, the boundary between cold rolling and hot rolling should be distinguished by the recrystallization temperature. That is, rolling below the recrystallization temperature is cold rolling, and rolling above the recrystallization temperature is hot rolling. The recrystallization temperature of steel is 450 to 600°C.



热轧钢是一种用高温轧制钢材制成的钢

Hot rolled steel is a type of steel that is made by rolling steel at very high temperatures

在华氏1700度以上产生

Produced at temperatures above 1700 Faranhite degrees

比较优惠

Comparatively cheap

在不需要最终产品的精确尺寸的情况下使用

Used where exact dimensions of the final product are not necessary

生产与要求尺寸稍微不同尺寸的产品

Manufacture products with slightly different sizes than the required dimensions

冷轧钢是一种在室温等低温条件下轧制而成的钢

Cold rolled steel is a type of steel that is made by rolling steel at low temperatures such as room temperature

在室温或以下的温度下产生的

Produced at room temperature or below

与热轧钢相比, 价格昂贵

Costly when compared to hot rolled steel

能给出精确的尺寸和定义良好的边缘

Gives the exact dimensions and welldefined edges

由于先进的加工方法,成本很高

Cost is high due to advanced processing methods

热轧和冷轧的主要区别/The main difference between hot rolling and cold rolling

1、外观及表面质量:由于冷板是热板在冷轧工序后得到的,且还会进行一些表面精整所以冷板在表面质量(如表面粗糙度之类)上比热板好,所以如果对产品后续上漆等涂覆质量存在较高要求的,一般选择冷板。

1. Appearance and surface quality: Since the cold plate is obtained from the hot plate after the cold rolling process, and some surface finishing will be carried out, the surface quality of the cold plate (such as surface roughness) is better than that of the hot plate, so if there are higher requirements for the coating quality such as subsequent painting of the product, cold plates are generally selected.



2.性能:一般情况下,热板和冷板在工程中其机械性能是认为无区别的,虽然冷板在冷轧过程中存在一定的加工硬化,(不过不排除对机械性能要求严格的情况,那就需要区别对待了),冷板通常比热板的屈服强度稍高,表面硬度也高一些,具体怎么样需要看冷板退火的程度。但是不管怎么退火冷板强度是比热板高的。

2. Under normal circumstances, the mechanical properties of the hot plate and the cold plate are considered to be indistinguishable in engineering. Although the cold plate has a certain degree of work hardening during the cold rolling process, (but it does not rule out the strict requirements for mechanical properties, then it is necessary Treated differently), the yield strength of the cold plate is usually slightly higher than that of the hot plate, and the surface hardness is also higher, depending on the degree of annealing of the cold plate.

But no matter how annealed the cold plate is stronger than the hot plate.

成形性能Formability:

由于冷热板的性能基本差不太多,所以成形性能的影响因素就要看其表面质量的区别的,由于表面质量是冷板来的要好,所以通常来讲同材质的钢板,冷板比热板的成形效果来得好一些.

Since the performance of cold and hot plates is basically semblable, the influencing factors of formability depend on the difference in surface quality. Since the surface quality is better from cold plates, usually steel plates of the same material are used. The forming effect of the cold plate is better than that of the hot plate.



产品标准 Product Standard ASTM A240

Chemical Component 化学成分	С	Mn	Р	S	Si	Cr	Ni	Мо	N	Cu
430	0.12	1.00	0.04	0.03	1.00	16.00-18.00	0.75	/	/	1
420	0.15min	1.00	0.04	0.03	1.00	12.00-14.00	0.75	0.5	/	/
409	0.03	1.00	0.04	0.02	1.00	10.50-11.70	11.7	0.5	1	0.03
439	0.03	1.00	0.04	0.03	1.00	17.00-19.00	0.50	/	0.03	/
410S	0.08	1.00	0.04	0.03	1.00	11.50-13.50	0.60	1	/	/
201	0.15	5.50-7.50	0.06	0.03	1.00	16.00-18.00	3.50-5.50	/	0.25	1
202	0.15	7.5-10.0	0.06	0.03	1.00	17.00-19.00	4.00-6.00	1	0.25	/
301	0.15	2.00	0.045	0.03	1.00	16.00-18.00	6.00-8.00	/	0.10	/
302	0.15	2.00	0.045	0.03	0.75	17.00-19.00	8.00-10.0	/	0.10	/
304	0.07	2.00	0.045	0.03	0.75	17.50-19.50	8.0-10.5	/	0.10	/
304L	0.03	2.00	0.045	0.03	0.75	17.50-19.50	8.0-12.0	/	0.10	/
316	0.08	2.00	0.045	0.03	0.75	16.00-18.00	10.0-14.0	2.00-3.00	0.10	/
321	0.08	2.00	0.045	0.03	0.75	17.00-19.00	9.0-12.0	1	0.10	/
316L	0.03	2.00	0.045	0.03	0.75	16.00-18.00	10.0-14.0	2.00-3.00	0.10	/
309S	0.08	2.00	0.045	0.03	0.75	22.00-24.00	12.0-15.0	1	/	/
310S	0.08	2.00	0.045	0.03	1.50	24.00-26.00	19.0-22.0	/	1	/
317	0.08	2.00	0.045	0.03	0.75	18.00-20.00	11.0-15.0	3.0-4.0	0.10	1
317L	0.035	2.00	0.045	0.03	0.75	18.00-20.00	11.00-15.00	3.0-4.0	/	1
347	0.08	2.00	0.045	0.03	0.75	17.00-19.00	9.00-13.00	/	/	/
31803	0.03	2.00	0.03	0.02	1.00	21.00-23.00	4.50-6.50	2.5-3.5	0.08-0.20	/
2205	0.03	2.00	0.03	0.02	1.00	22.00-23.00	4.50-6.50	3.0-5.0	0.14-0.20	/
253MA	0.08	0.80	0.040	0.03	1.60	21.00	11.00	/	0.17	1
904L	0.02	2.00	0.045	0.035	1.00	19.0-23.00	23.00-28.00	4.00-5.00	0.10	1.00-2.00
2507	0.03	1.20	0.035	0.02	0.80	24.00-26.00	6.00-8.00	3.00-5.00	0.24-0.32	0.50
254SMO	0.02	1.00	0.030	0.01	0.80	19.50-20.50	17.05-18.50	6.00-6.50	0.18-0.22	0.50-1.00
316ti	0.08	2.00	0.035	0.03	1.00	16.00-19.00	10.00-14.00	1.80-2.50	ti:0.20-0.	70

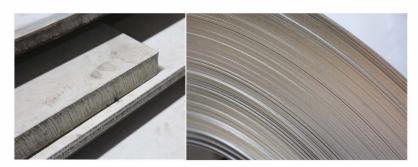
机械性能Mechanical Property	Tensile Stre 抗拉强度	ength, min 、最小值	Yield Stre 屈服强度	ngth, min 、最小值	Elongation 伸长率	Hardnes 硬度 晶	ss, max 表大值
	ksi	Мра	ksi	Мра		Brinell HBW	Rockwell
430	65	450	30	205	22	183	89HRBW
420	100	690	/	/	15	217	96HRBW
409	55	380	25	170	20	179	88HRBW
439	60	415	30	205	22	183	89HRBW
410S	60	415	30	205	22	183	89HRBW
201	75	515	38	260	40	217	95HRBW
202	90	620	38	260	40	241	/
301	75	515	30	205	40	217	95HRBW
302	75	515	30	205	40	201	92HRBW
304	75	515	30	205	40	201	92HRBW
304L	70	485	25	170	40	201	92HRBW
316	75	515	30	205	40	217	95HRBW
321	75	515	30	205	40	217	95HRBW
316L	70	485	25	170	40	217	95HRBW
309S	75	515	30	205	40	217	95HRBW
310S	75	515	30	205	40	217	95HRBW
317	75	515	30	205	35	217	95HRBW
317L	75	515	30	205	40	217	95HRBW
347	75	515	30	205	40	201	92HRBW
31803	90	620	65	450	25	293	31HRC
2205	95	655	65	450	25	293	31HRC
904L	71	490	31	220	35	/	90HRBW
2507	116	795	80	550	15	310	32HRC
253MA		600	310	310	40	217	95HRBW
254SMO	100	690	45	310	35	233	96HRBW
316TI		≥520		≥205	≥40	178	90HRBW

厚度范围\Thickness range

热轧Hot-rolled:2.5mm-200mm 冷轧Cold-rolled:0.3mm-6mm

宽度范围\Width range

热轧Hot-rolled:1000mm-3500mm 冷轧Cold-rolled:10mm-2000mm



功能和使用\Features and usages



高温应用材料 Material for Hight-temperature Service						
6.1	奥氏体H型应符合ASTM NO.7的平均晶粒 尺寸或试验方法E112测得的较粗晶粒 尺寸。	The austenitic H types shall conform to an average grain size of ASTM No,7 or coarser as measured by Test Methods E112.				
6.2	当订购非 H 级奥氏体不锈钢用于 ASTM 规范应用以在 1000°F 左右的温度下使用时,应调用补充要求 S2。	Supplementary Requirement S2 shall be inviked when non-H grade austenitic stainless steel are ordered for ASTM Code applications for serviceabout 1000°F				
6.3	除非采购订单中另有规定,否则 S31060 钢级应符合 ASTM No.7 或更粗的平均晶 粒尺寸,由测试方法 E112 测量。	Grade S31060, unless otherwise specified in the perchase order, shall conform to an average grain size of ASTM No. or coarser, as mearsured by Test Methods E112.				

工艺\Workmanship

材料应具有与良好制造和检验实践一致的均匀质量。对于订购的类型和质量,钢材不应有任何性质或程度的缺陷,这将对冲压、成型、机加工或制造产生不利影响。

The material shall be of uniform quality consistent with good manufacturing and inspection practices. The steel shall have no imperfections of a nature or degree, for the type and quality ordered, that will adversely affect the stamping, forming, machining, or fabrication of finished parts.

薄板、带材和板材——用于薄板和带材,仅限于按照 I 号光洁度处理的材料,以及仅限于订购热轧和退火材料的板材 或分别按照热轧、退火和酸洗精整,允许研磨以去除表面缺陷,前提是这种研磨不会使任何一点的厚度或宽度减小到超出允许的尺寸变化范围。应使用不含铁的砂轮进行此类磨削,并应以足够的速度运行,以确保将缺陷区域干净地切掉. Sheet, Strip, and Plate—For sheet and strip, restricted only to material ordered to have a No. I finish, and for plate restricted to material ordered to hot-rolled and annealed or hot-rolled, annealed, and pickle finish, it is permitted to grind to remove surface imperfections, provided such grinding does not reduce the thickness or width at any point beyond the permissible variations in dimensions. An iron free abrasive wheel shall be used for such grinding and shall be operated at a speed ample to ensure that







尺寸和形状公差 ASTM A480 Dimensions and Shape Tolerance ASTM A480

尺寸-英寸-磅单位的允许公差\PERMITTED VARIATIONS IN DIMENSIONS-INCH-POUND UNITS

表A1.1冷轧、窄、卷材加工产品作为卷材和切割长度的允许厚度变化

TABLE A1.1 Permitted Variations in Thickness for Cold-rolled, Narrow, Coil-processed Product as Coils and Cut Lengths

注 1 - 厚度测量在距产品边缘至少 3/8 英寸 [9.52 毫米] 处进行,宽度小于 1 英寸 [25.4 毫米] 的测量应至少在 1/8 英寸处进行。[3.18mm] 距产品边缘。

Note1-Thickness measurements are taken at least 3/8 in.[9.52mm] in from the edge of the product, except on widths less then 1 in.[25.4mm] the measurements should be taken at least 1/8 in.[3.18mm] from the product edge.

厚度公差,用于给定的厚度和宽度(毫米) Thickness Tolerances, for the Thickness and Widths Given, Over and Under, in. [mm]						
指定的厚度 Specified Thickness, in.[mm]	W ≤ 6 [152]	6[152] <w≤12[305]< th=""><th>12 [305] <w 24="" [610]<="" th="" ≤=""></w></th></w≤12[305]<>	12 [305] <w 24="" [610]<="" th="" ≤=""></w>			
0.002 to 0.005 (0.05 to 0.13], excl	10%	10%	10%			
0.005 to 0.010 (0.13 to 0.25], incl.	0.0006 (0.015]	0,0008 [0.020]	0.001[0.025]			
Over 0.010 to 0.012 [0.25 to 0.30), incl	0.001 (0.025]	0.001 (0.025]	0.001[0.025]			
Over 0.012 to 0.015 [0.30 to (0.40], incl	0.001 (0.025]	0.0015(0.04]	0.0015(0.04]			
Over 0.015 to 0.020 [0.40 to 0.50), incl	0.001 (0.025]	0.0015(0.04]	0.0015(0.04]			
Over 0.020 to 0.029 (0.50 to 0.74], incl	0.0015 [0,04]	0.0015(0.04]	0.002 [0.050]			
Over 0.029 to 0.035 (0.74 to 0.89), incl	0.0015 (0.04]	0.002 (0.050]	0.002 [0.050]			
Over 0.035 to 0.050 [0.89 to (1.27], incl	0.0025 (0.060]	0.003 (0.070]	0.003 [0.070]			
Over 0.050 to 0.069 [1.27 to 1.75], incl	0.003 [0.070]	0.003 (0.070]	0.003 [0.070]			
Over 0.069 to 0.100 [1.75 to 2.54), incl	0.003 (0.070]	0.003 (0.070]	0.004[0.10]			
Over 0.100 to 0.125 (2.54 to 2.98), incl	0.004 (0.10]	0.004 (0.10)	0.005 [0.12]			
Over 0.125 to 0.161 (2.98 to 4.09J, incl	0.005 [0.12]	0.005 [0.12]	0.005 [0.12]			
Over 0.161 to under 3/16(4.09 to under 4.76]	0.005 (0.12]	0.005 [0.12]	0.006 [0.15]			

宽度公差,超过和低于,为厚度和宽度给定 Width Tolerance, Over and Under, for Thickness and Width Given, in. [mm]

指定的厚度 Specified Thickness 8, in[mm]	W≤1.60"[40mm]	1.60"[40mm] <w≤6≤150mm]< th=""><th>6"[150mm]<w≤12"[305mm]< th=""><th>12" [305mm] < w ≤ 24"[610mm]</th></w≤12"[305mm]<></th></w≤6≤150mm]<>	6"[150mm] <w≤12"[305mm]< th=""><th>12" [305mm] < w ≤ 24"[610mm]</th></w≤12"[305mm]<>	12" [305mm] < w ≤ 24"[610mm]
0.010 [0.25mm]	0.003"[0.085mm]	0.004 [0.10mm]	0.005"[0.125mm]	0.020"[0.50mm]
0.020 [0.50mm]	0.005"[0.125mm]	0.005"[0.125mm]	0.010"[0.25mm]	0.020"[0.50mm]
0.040 [1.00mm]	0.005"[0.125mm]	0.005"[0.125mm]	0.010"[0.25mm]	0.020"[0.50mm]
0.060 [1.50mm]	0.005"[0.125mm]	0.006"[0.15mm]	0.010"[0.25mm]	0.020"[0.50mm]
0.100 [2.50mm]		0.010"[0.25mm]	0.016"[0.40mm]	0.020"[0.50mm]
0.120 [3.00mm]		0.010"[0.25mm]	0.016"[0.40mm]	0.024"[0.60mm]
0.160 4.00mm]		0.016" 0.40mm]	0.016"[0.40mm]	0.024"[0.60mm]
0.200 [4.99mm]		0.030"[0.80mm]	0.030"[0.80mm]	0.030"[0.80mm]

对于所示以外的指定厚度, 应适用下一个更高厚度的公差。

For specified thickness other than those shown, the tolerances for the next higher thickness shall apply.

表A1.3冷轧时允许的长度变化 TABLE A1.3 Permitted Variations in Length for Cold-rolled, Narrow, Coil-processed Product as Cut Lengths

指定长度 Specified Length, ft [mm]	公差 Tolerances, in. [mm]	
ft≤6 [1830mm] 6 <ft≤12 (1830="" 3660mm)<br="" ~="">12 <ft≤20 6096mm]<="" [3660~="" td=""><td>+1/8"[3mm],-0 +0.2"[5mm],-0 +0.3"[8mm],-0</td><td></td></ft≤20></ft≤12>	+1/8"[3mm],-0 +0.2"[5mm],-0 +0.3"[8mm],-0	

表A1.4冷轧窄盘管加工产品的平面度允许的长度变化 TABLE A1.4 Permitted Variations in Flatness of Cold-rolled, Narrow, Coil-processed Product as Cut Lengths

冷轧产品、窄卷加工产品的平面度变化的公差应与表A1.8中列出的冷轧宽卷加工产品的公差相同,除非卖方和买方另有协议并在采购订单中明确规定。

Tolerances for variations of flatness cold-rolled products, narrow, coilprocessed product as cut lengths shall be identical to the tolerances for coldrolled, wide, coil-processed product as listed in Table A1.8 unless otherwise agreed upon by seller and purchaser and specified in the purchase order.

表A1.5允许的冷轧厚度变化。宽, 卷料加工产品, 如卷料和切料 TABLE A1.5 Permitted Variations in Thickness of Cold-Rolled. Wide, Coil-Processed Product as Coil and Cut Lenaths

Specified Thickness ^{A,B} , in. [mm]		Permitted Variation, Over and Unde [mm], for specified width (w), w in	
	w ≤ 40 [1000]	40 [1000] < <i>w</i> ≤ 50 [1300]	50 [1300] < <i>w</i> ≤ 84 [2100]
0.012 [0.30]	0.001 [0.030]		***
0.016 [0.40]	0.0015 [0.04]	0.0015 [0.04]	***
0.020 [0.50]	0.0015 [0.04]	0.0015 [0.04]	
0.024 [0.60] 0.032 [0.80]	0.002 [0.05] 0.002 [0.05]	0.002 [0.05] 0.002 [0.05]	***
0.040 [1.00] 0.047 [1.20]	0.0025 [0.06] 0.003 [0.08]	0.0025 [0.06] 0.003 [0.08]	0.003 [0.08] 0.003 [0.08]
0.059 [1.50]	0.003 [0.08]	0.003 [0.08]	0.004 [0.10]
0.079 [2.00]	0.004 [0.10]	0.004 [0.10]	0.0045 [0.11]
0.098 [2.50]	0.004 [0.10]	0.004 [0.10]	0.005 [0.13]
0.118 [3.00]	0.005 [0.13]	0.005 [0.13]	0.006 [0.15]
0.157 [4.00]	0.007 [0.17]	0.007 [0.17]	0.007 [0.17]
0.197 [5.00] 0.236 [6.00] 0.3125 [8.00]	0.007 [0.17] 0.007 [0.17] 0.007 [0.17]	0.007 [0.17] 0.008 [0.20] 0.009 [0.23]	0.0075 [0.19] 0.009 [0.23] 0.010 [0.25]

表A1.6冷轧宽卷加工产品允许的宽度变化,如切割长度(不重方)和卷材 TABLE A1.6 Permissible Variations in Width for Cold-rolled Wide, Coil-processed Product as Cut Lengths (Not Resquared) and Coil

SpecifiedThickness, in.	[mm] [^]	F	Permitted Variation in Width (w), in. [mm], for Specified Width (w), in. [mm]				
	W≤6[150]	6[125] <w≤12[300]< th=""><th>12[300]<w≤24[600]< th=""><th>24[600]<w<48[1200]< th=""><th>48[1000]≥w</th></w<48[1200]<></th></w≤24[600]<></th></w≤12[300]<>	12[300] <w≤24[600]< th=""><th>24[600]<w<48[1200]< th=""><th>48[1000]≥w</th></w<48[1200]<></th></w≤24[600]<>	24[600] <w<48[1200]< th=""><th>48[1000]≥w</th></w<48[1200]<>	48[1000]≥w		
0.040"[1.00mm]	+0.02"[0.5mm],-0	+0.02"[0.5mm],-0	+0.03"[0.7mm],-0	+1/16"[1.6mm],-0	+1/8"[3.2mm],-0		
0.059"[1.50mm]	+0.03"[0.7mm],-0	+0.03"[0.7mm],-0	+0.04"[1.0mm],-0	+1/16"[1.6mm],-0	+1/8"[3.2mm],-0		
0.098"[2.850mm]	+0.04"[1.0mm],-0	+0.04"[1.0mm],-0	+0.05"[1.2mm],-0	+1/16"[1.6mm],-0	+1/8"[3.2mm],-0		
0.138"[3.50mm]	+0.05"[1.2mm],-0	+0.05"[1.2mm],-0	+0.06"[1.5mm],-1	+1/16"[1.6mm],-0	+1/8"[3.2mm],-0		
0.3125"[8.00mm]	+0.08"[2.0mm],-0	+0.08"[2.0mm],-0	+0.08"[2.0mm],-0	+0.16"[4.0mm],-0	+0.16"[4.0mm],-0		

表A1.7冷轧宽卷加工产品允许的长度变化,作为未再平方的切割长度

TABLE A1.7 Permitted Variations in Length for Cold-rolled, Wide, Coil-processed Product as Cut Lengths Not Resquared

L长度ftSpecified Length (L), ft [mm]	Tolerances, in. [mm]				
	Over	Under			
L≤6[1830mm]	3/16"[4.8mm]	0			
L>6[1830mm]	0.03"*L[0.0025mm*L]	0			

表A1.8冷轧板形允许偏差,宽,线圈加工产品的切割长度 TABLE A1.8 Permitted Variations in Flatness of Cold-rolled, Wide, Coil-processed Product as Cut Lengths

			11.000	
Not Specified	to Stretcher-Leve	led Stand	ard of Flatne	ss ^A
Specified Thickness, in. [mm]	Width, in. [mm]			Flatness Tolerance, ^B in. [mm]
<0.062 [1.57]	≤60 [1524]			0.40 [10]
	>6	>60 [1524]		0.50 [12]
≥0.062 [1.57]	≤60 [1524]			0.40 [10]
	>6	>60 [1524]		0.50 [12]
Strete	cher-Leveled Stan	dard of FI	atness ^C	
Specified Thickness,	Width,	Le	ength,	Flatness
in. [mm]	in. [mm]	in.	[mm]	Tolerance, ^B in. [mm]
<3/16 [4.76]	<48 [1219]	<96 [2438]		1/8 [3.2]
	<48 [1219]	≥96	[2438]	1/4 [6.4]
<3/16 [4.76]	≥48 [1219]		[2438]	1/4 [6.4]
	≥48 [1219]	≥96	6 [2438]	1/4 [6.4]
2xx and 3xx	Series Specified to	1/4 and 1/	2 Hard Temp	ers
Specified Thickness, in. [mm]	Width, in. [n	nm]	Flatness in.	Tolerance, ^B [mm]
		_	1/4 Hard	½ Hard
<0.016 [0.41]	24 [610] to <36	[914]	1/2 [12.70]	3/4 [19.05]
0.016 [0.41] to 0.030 [0.76]			5/8 [15.88]	7/8 [22.22]
>0.030 [0.76]			3/4 [19.05]	7/8 [22.22]
≤0.016 [0.41]	36 [914] to <48	[1219]	% [15.88]	1 [25.40]
>0.016 [0.41] to 0.030 [0.76]			3/4 [19.05]	11/8 [28.58]
>0.030 [0.76]			1 [25.40]	11/8 [28.58]

A. 未规定用担架拉平标准的平整度,且不包括硬面2xx和3xx系列回火,超软板材和深冲板材。 A. Not specified to stretcher-leveled standard of flatness, and not including hard tempers of 2xx and 3xx Series, dead-soft sheets, and deep-drawing sheets.

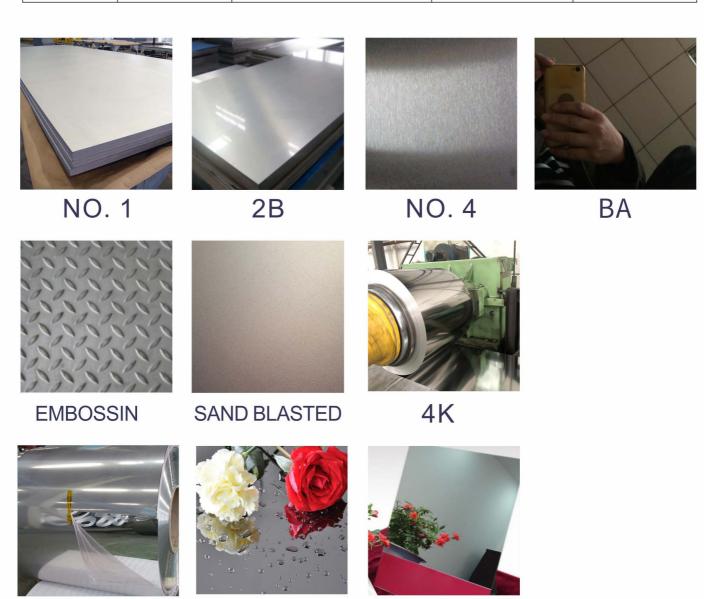


表面处理分类 Surface Treatment Classification

- 常用不锈钢表面处理的分类、特点及应用领域
- Introduction to the classification, characteristics and application fields of common stainless steel surface treatment

表面处理	加工方法 Processing Method	特性 Surface Characteristics	应用 Applications
Surface Treatment	Processing Method	Surface Characteristics	Applications
No.1酸洗 No.1	*热轧后经热处理、酸洗处理的表面,适用于工业上需耐热、耐蚀,表面光亮程度不为重要。 *The surface treated by heat treatment and pickling after hot rolling. It is suitable for industries that require heat resistance and corrosion resistance, and the surface brightness is not important.	*表面白色光亮 *银白色, 无光泽 *White and bright surface *Silver white, matt	*工业用槽罐,化学工业装置等 *Industrial tank, Chemical industrial plants, etc.
No. 2D 钝面 No.2D	*冷轧后经热处理、酸洗,适用需伸长轧延加工。 *Heat treatment and pickling after cold rolling, it is suitable for elongation and rolling processing.	*表面呈银白色光泽 *材质柔软 *Silver-white surface *Soft material	*石油化工生产设备、汽车构件、建筑材料、水管道材料等 *Petrochemical production equipment, automotive components, building materials, water pipes, etc.
No. 2B 雾面 No. 2B	*在NO.2D处理后,再以抛光辊轻轻冷轧,以获得适当的光泽,用途广泛,适用于一般轧延加工。 *After NO.2D treatment, the final pass is lightly cold rolled by a polishing roller to obtain proper gloss.It has a wide range of uses and is suitable for general rolling processing.	*表面平滑光亮 *易于再研磨, 使表面更加光亮 *Smooth and bright surface *Easy to re-grind to make the surface more brighter	*建材、餐具等 *Building materials, tableware, etc.
No. Ba 光亮退火 No. BA	*冷轧后经光亮退火热处理,并加以调质轧延,光泽强于NO.2D,同镜面的表面,适用需光泽之产品。 *After cold rolling, it is bright annealed and tempered and rolled.The gloss is stronger than NO.2D, like the mirror surface and it is suitable for products that require gloss.	*表面光泽度极好 *反射率高、表面光滑 *Excellent surface gloss *High reflectivity, smooth surface	*厨具、餐具、镜子、家电产品、水塔等 *Kitchenware, tableware, mirrors, household electrical appliances, water tower, etc. *医疗器材、脚踏车零件、建筑装饰等 *Medical equipment, bicycle parts, architectural decoration, etc.
No. 3 粗砂 No. 3	*用粒度100-120号研磨带研磨出来的,它具有更好的 光泽和不连续的粗线条。 *No.3 is a product ground with a 100-120 grinding belt. It has better gloss and discontinuous rough lines.	*光泽度佳 *Good gloss	*建筑内外装饰材料、牧场挤奶设备 *Interior and exterior decoration materials of building, pasture milking equipment *牛奶食品加工设备、电器产品、厨房 设备等 *Milk food processing equipment, electrical products, kitchen equipment, etc.
No. 4 雪花砂 No. 4	*用粒度150-180号研磨带研磨出来的,它比No.3具有更好的光泽度、不连续的粗线条和更细的条纹。不锈钢铸件常用抛光和砂光表面*NO.4 is a product ground with a grinding belt of size 150-180. It has better gloss, discontinuous rough lines and finer stripes than No.3. Stainless steel castings commonly used polished and sanded surfaces.	*光泽度佳 *普遍的表面处理方式 *Good gloss *Common surface treatment	*建筑内外装饰材料、厨房设备与医疗设备 *牛奶食品加工设备、电器产品、浴缸等 *Interior and exterior decoration materials of building, kitchen equipment , medical equipment *Milk food processing equipment, electrical products, bathtubs, ect
HL 拉丝面 HAIR LINE	*以适度研磨材料以造成连续条纹加工,有明显的直线条纹。 *Use a polishing abrasive belt with an appropriate particle size (150-320 mesh) to grind, with obvious straight stripes.	*美观, 质感较好 *刮伤不明显、耐用、耐磨 *Beautiful, good texture *Scratch is not obvious, durable, wear-resistant	*建筑装饰、电梯、扶梯 *门面、窗框、厨房设备、车辆零件 *Building decoration, elevators, escalators *Building doors, window frames, kitchen equipment, vehicle parts, etc.

表面处理 Surface Treatment	加工方法 Processing Method	特性 Surface Characteristics	应用 Applications
	*它是通过依次使用更细的磨料抛光和广泛抛光直到 去除初步研磨操作中的所有砂纹线而制成的。 *It is produced by polishing with successively finer abrasives and buffing extensively until all grit lines from preliminary grinding operations are removed.	*反射率最高 *Highest reflectivity	*汽车和建筑物的内外装饰材料 *Mainly used for interior and exterior decoration materials of automobiles and buildings.
镜面 Mirror	*不锈钢表面等级分为2B、BA、4K、6K、8K。4K比BA 清晰。 *6K有一定的亮度,能看到模糊的数字。6K镜是在 BA的基础上抛光 *8K光度比较一般,可以清晰的显示图形。 *5tainless steel surface grade is divided into 2B, BA, 4K, 6K, 8K。4K is clearer than BA. *6K has some brightness and can only blur numbers. 6K mirror is polished on the basis of BA. *8K luminosity is more general, and the figure can be clearly displayed	* 最具反射性的机械抛光 *It is the most reflective mechanically polished possible.	*主要用于酒店、商场、会所、 彩吧、豪华游艇、镜子、装饰等 建筑应用 *Mainly used for architectural application in hotels, Shopping malls, clubs, Colorful bar, Luxury boats, Mirror, Decoration



8K

6K

MIRROR

质保 Quality Assurance



1	程序审批 Approval of various procedures (e.g. UT etc)	ASTM标准及技术规范 ASTM standard and technical specification
2	原材料鉴定/检验 Raw material identification /Inspection	A 240技术规范 A 240 Technical specification
3	成品分析 Product analysis	A 240技术规范 A 240 Technical specification
4	外观/尺寸 Visual/Dimensions	A 240技术规范 A 240 Technical specification
5	机械测试Mechanical tests 抗拉试验Tensile test 压平试验Flattening test 硬度试验Hardness test 其他指定试验Others as specified	技术规范A240/A 480/SA 370/ Technical specification A240 / SA 370 / A480
6	晶粒度, 宏观检测 Grain size, Macro examination	A 240/E-112/技术规范 A 240/E-112/Technical specification
7	杂质检测 Inclusion	E-45/技术规范 E-45/ Technical specification
8	铁素体检测 Delta ferrite	技术规范 Technical specification
9	晶间腐蚀-A IGC practice –A	根据ASTM标准及技术规范 ASTM standard and Technical specification

10	晶间腐蚀-C IGC practice –C	A 262/技术规范 A 262/ Technical specification
11	热处理记录 Heat treatment record	A 262/技术规范 A 262/Technical specification
12	超声波测试 (适用于厚度为6毫米及以上的板材) Ultrasonic test (for plates having 6 mm and above thickness)	ASTM A-577 & A-578/技术规范 ASTM A-577 & A-578/ Technical specification
13	审核样本的结果Results of Audit Samples 其他指定试验Others as specified	技术规范 Technical specification
14	外观和尺寸检查及检查表面清洁度 Visual and dimensional inspection & check for surface cleanliness	A 240 /A 480/技术规范 A 240 /A 480/Technical specification
15	产品标识(标识内容须经买方书面确认) Product marking (Content of marking is to be got cleared from Purchaser in writing)	A 240 /A 480/技术规范 A 240 /A 480/Technical specification
16	包装 Packing	技术规范 Technical specification
17	最后检查文档和证书 Final inspect documentation and certification	SA 240 /A 480/相关的ISO标准 SA 240 /A 480/ Relevant ISO Standard

包装及唛头Packing and Mark

包装Packing

- 不锈钢钢带
- Stainless steel strip









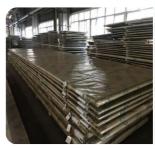




- 不锈钢卷
- Stainless steel coil

- 不锈钢冷轧板
- Stainless steel cold rolled sheet
- 0.5mm--3.0mm (1mx2m, 4' x8', 5' x10')







- 不锈钢热轧板
- Stainless steel hot rolled sheet
- 3.0mm-80.0mm (1250mm, 1500mm, 1800mm, 2000mm, 2500mm and other widths)

唛头Mark

Ronsco	MADE IN CHINA
品名:	合同号:
GRADE	CONTRACT NO.
净重:	毛重:
N.W	
规格:	规格:
DIMENTION	DIMENTION
MM	MM
PACKING NO.:	

订货指南 Ordering Guide

- 订货指南:请提供以下信息
- Ordering guide: please provide the following information when ordering.

-	
1	产品类型: 卷/板/钢带 Product type: coil/plate/steel strip.
2	数量/重量/标准/牌号/交货日期 Quantity/weight/standard/grade/date of delivery.
3	产品尺寸:长度,宽度,厚度 Product size: length, width, thickness.
4	加工工艺:冷轧/热轧 Processing technology: cold/hot rolling.
5	表面处理 Surface finish: No.1/No.2/No.2D/No.2B/No.BA/No.3/No.4/Dull/Mirror (4K/6K/8K).
6	应用或零部件名称 Name of application or part.
7	包装要求 a.钢卷、钢带:单卷重量上下限,单卷内径和外径。 b.板材: 单包重量上下限。 Packing requirement Coil and strip: upper and lower limit of single coil weight, inner diameter and outer diameter of single coil. Plate: upper and lower limits of weight per package.
8	其他要求:表面精加工、边缘种类、形状、涂油等。 Other requirements: surface finishing, edge type, shape, oiling, etc
9	备注: 如有特别需求请联系我们。 Note: Please contact us if you have any special requirements.

项目案例 Projects Sharing



Turkey 430&304 cold rolled stainless steel coils 782 tons



Indonesia 316 stainless steel coil 64 tons



Turkey 430&304 cold rolled stainless steel coils 782 tons

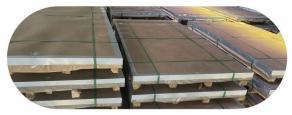
不锈钢板Corrosion Resistant Plate



Philippine 304&316 stainless steel plate 70 tons



Netherlands 309S thick stainless steel plate 72 tons



Philippines 304 & 316 stainless steel plate 70 tons



Canada 304 thick stainless steel plate 528 tons

不锈钢带Stainless Steel Strip



USA 304/316 stainless steel strip and plate 6*20GP 143 tons

不锈钢卷板加工服务 Stainless Steel Coil Processing Services

加工设备 Fabricating Machinery



NC Drilling Machine 6 MetersX6 Meters



NC Vertical Lathe Machine 10 Meters



Gantry Portable CNC Boring-milling Machine 5 Meters



Laser Cutting Machine
3 MetersX12 Meters 50mm Thickness



Deep Hole Drilling Machine 5 MetersX5 Meters Depth 750mm



Bending Machine 15 MetersX 100mm Thickness



200 Floor-stand NC Milling-boring Machine



Gantry Portable CNC Boring-milling Machine 6 MetersX16 Meters



Gantry Portable CNC Boring-milling Machine 5 MetersX16 Meters



Rolling Machine
3.5 MetersX160mm thickness

- 卷圆/折弯/剪切/分条/开平/坡口/表面处理
- Rolling/Bending/Cutting/Slitting/Decailing/Beveling /Surface processing

卷板加工案例 Processing cases sharing



Country: Chile Product Name: Perforated Angle bar. Product Application: Industry Material: 304 Stainless steel Qty: 150pcs

Year: 2016



Year: 2017 Country: Singpore Product Name: Cutting handrial Product Application: Decorative Material: 304 Stainless Steel



Year: 2017 Country: Canada Product Application: water treatment equipment Product Name: Processing stainless steel products Material: Stainless steel 304 & 316 Qty: 40 tons



Year: 2018
Country: Russia
Product Application: Water
treatment equipment
Product Name: Stainless Steel
Perforated Pipe
Material: AISI 321
Qty:13 dimensions with 36tons



Year: 2019
Country: South Africa
Product Application: Paper mill
tank
Product Name: Rolling plates &
angel bars
Material: Duplex 2205
Qty: 100 tons



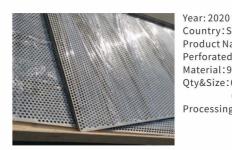
Year: 2019
Country: Singapore
Product Application: Street
Grating for infrastructure
Product Name: Stainless Steel
Gratings
Material: AISI 304
Qty: 49 dimensions with 697pcs



Year: 2019
Country: Congo
Product Application: Copper
Mine
Product Name: Rolling plates &
Circular plate
Material: Duplex 2205
Qty: 40pcs for rolling plates and
2pcs with different designs and
dimensions



Year: 2020 Country: Malaysia Product Application: water project Product Name: Customized machine equipment Material: 2205 Qty: 20 set



Country:South Africa
Product Name: Stainless Steel
Perforated Sheet
Material:904L
Qty&Size:6*1494*1553.5mm 3pcs
6*1482.5*2136mm 2pcs
Processing as per drawing



Year: 2020 Country: Malaysia Product Application: water project Product Name: Customized machine equipment Material: 2205 Qty: 20 set



Year: 2020 Country: Malaysia Product Application: KL 118 building Product Name: Customized machine equipment Material: 2205 Qty: 20 set

出口国家 Export Countries



CONGO
EGYPT
KENYA
MADAGASCAR
MAURITIUS
MOROCCO
NIGERIA
SOUTH AFRICA
TUNISIA
ARGENTINA
BRAZIL
CANADA

CHILE
COLOMBIA
ECUADOR
HONDURAS
MEXICO
PANAMA
PERU
UNITED STATES
URUGUAY
VENEZUELA

INDONESIA
IRAN
ISRAEL
JORDAN
KOREA
KUWAIT
MALAYSIA
PAKISTAN
PHILIPPINES
SAUDI ARABIA

SINGAPORE SRI LANKA THAILAND TURKEY VIETNAM BELARUS GERMANY GREECE NETHERLANDS RUSSIA SLOVAKIA UKRAINE UNITED KINGDOM AUSTRALIA FIJI NEW ZEALAND

Contract U



Ronsco—Stainless Steel Supplier You Can Trust



湖南安联金属制品有限公司

HUNAN ALLIANZ METAL PRODUCTS CO., LTD

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