地址: 山西省太原市尖草坪 ≥号

Add: No. 2 Jiancaoping Taiyuan, Shanxi, P.R. China.

邮编 (Post Code): 030003

电话 (Tel); +86 (0) 351-3011431 传真 (Fax); +86 (0) 351-3130793 网址 (http); //www.tisco.com.cn 服务热线(Hotline); 400-653-1998

800-806-1998





船舶行业用钢

SHIPBUILDING STEEL

太钢产品分行业系列册 Products Serial Catalogs Of Tisco For Different Industries



太原钢铁(集团)有限公司 Taiyuan Iron & Steel (Group) Co., Ltd.

PAGE\01-02

目录

- 02、太钢简介 Brief on TISCO
- 05、工艺流程 Process Flow
- 07、研发能力 Research and Development
- 07、企业荣誉 Honors & Awards
- 08、质保体系 Quality Assurance System
- 09、常规产品 Conventional Products
- 16、产品应用 Application
- 17、服务承诺 Service Promise
- 17、合作伙伴 Cooperative Partner
- 18、联系方式 Contacting Manners of the Main Business Sections



太钢简介

Brief on TISCO

太原钢铁 (集团)有限公司(简称太铜)是中国特大型钢铁 联合企业和全球最大、工艺技术装备水平最高、品种规格最全的 不锈钢企业。经过70余年发展,已具备1000万吨以上钢、铁、 材的生产能力,其中不锈钢产能达300万吨。2009年生产不锈钢 248万吨,产量世界第一!

太钢是中国第一炉不锈钢、第一炉硅钢、第一张硅钢片的诞 生地。拥有铁矿石等钢铁冶炼原料的采掘与加工、钢铁冶炼、钢 铁材料压力加工、冶金设备及备品备件制造等方面先进技术和装 备,主要产品有不锈钢、冷轧硅钢片(卷)、热连轧卷板、车轴



钢、合金模具钢、军工钢等。产品广泛应用于石油化工、交通运输、建筑装饰、家用电器、医疗食品等行业及神 舟系列飞船、嫦娥一号、"东风"系列火箭及核电站等高端领域,进入三峡水利、西气东输、奥运场馆及世博场 馆等国家重点工程。2009年在国家认定的575所企业技术中心中,太钢技术中心排名第二,位钢铁行业首位。太 钢拥有以不锈钢为核心的745项具有自主知识产权的核心技术,其中100多项达到国际先进水平。

太钢的发展战略是,加快建设全球最具竞争力的不锈钢企业,实现以不锈钢为主的品种、质量、成本、研 发、节能、环保、效率、服务等各项指标达到国际一流水平,建设具有国际竞争力的大企业集团。

Taiyuan Iron and Steel (Group) Co. Ltd. (TISCO) is one of the steel giants in China and, the largest stainless producer in the world in term of capacity equipped with the most advanced facilities covering pretty-wide product range. After over 70 years development TISCO has the capacity of 10 million tons of steel, which includes 3 million tons of stainless. The year of 2009 saw TISCO become No.1 stainless producer in the world with production of 2.48 million tons of stainless.

In TISCO came out the first heat of stainless steel and first heat of silicon steel as well as the first sheet of silicon in the history of China steel industry. TISCO is well equipped for mining and iron ore refining, iron and steel making, rolling and forging, metallurgical equipment and spare parts manufacturing. TISCO's products cover stainless steel of cold and hot rolling cold rolled silicon, hot rolled coil, axle steel, die steel and steel for military purpose etc. TISCO's products are widely used in petrochemical industry, transportation, construction decoration, home appliance, medical and food industry. TISCO's products can be also found in the national key projects such as Shenzhou spaceship, Chang'e-1 Moon Detector, Dongfeng rocket series and nuclear power, Three Gorges ,West-East natural gas transmission, and Olympic game facility as well as Shanghai world expos. In 2009TISCO technology centre ranked No.2 among the 575 state acknowleged enterprise technology institutions, and No.1 among the steel industry. TISCO owns 745 core patents in the field of stainless and over 100 patents are taken as the world class.

TISCO is aiming to become the most competitive stainless producer in the world, and achieve the first class stainless product in terms of product range, quality, cost, R&D, energy saving, environment protection, efficiency and service. For this goal TISCO is trying the first world class level and build itself into the world competitive large group company.

船舶行业用钢概况

太钢于1969年开始生产舰用钢板,1972年开始生产民用船板,至今有40余年的历史,目前已具备 55万吨/年的供货能力。

太钢生产船板有三个车间,船板产品品种规格齐全,不锈钢、碳钢均可供货,质量稳定,已获得 6个船级社认可,产品广泛用于建造各类船舶、海洋工程、船坞以及码头设施等。已进入的国内知名企 业中国船舶重工集团公司下的川东造船厂、天津新港船舶重工有限公司、山海关船舶重工有限公司,长 航集团下的金陵船厂,烟台来福士海洋工程有限公司、江苏东风重工有限公司,在国内享有较高声誉。

太钢船板将发挥不锈钢生产优势,定位于化学品船、特种船舶与海洋工程等特殊船舶用领域,为特 种船舶提供精美的钢板。

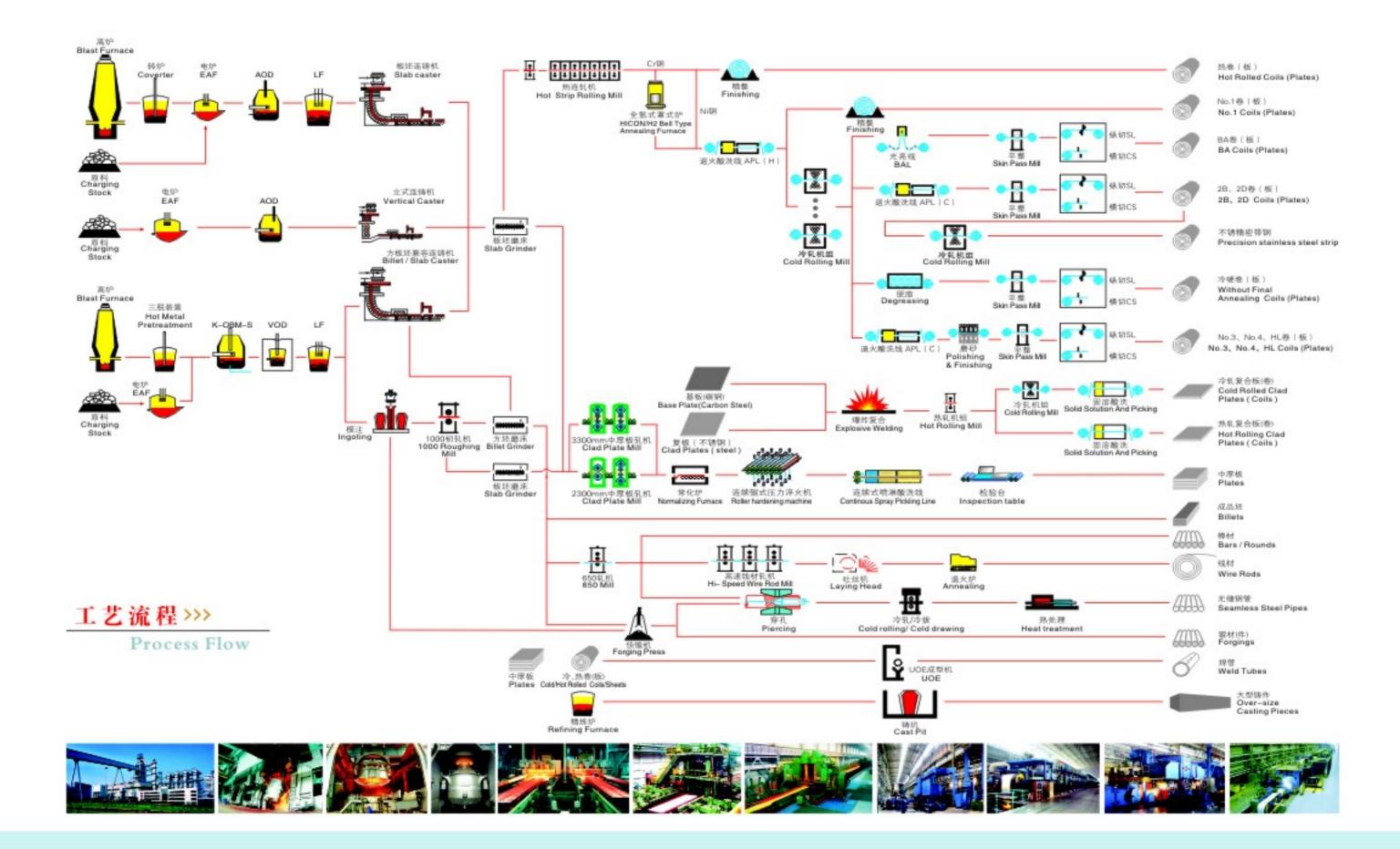
Brief on shipbuilding industry steel

TISCO has a shipbuilding plate production history of 40 years, it started to produce warship steel plate in 1969 and civil ship platein 1972. Today, TISCO has the shipbuilding plate supply capacity of 550 thousand ton per year.

There are 3 workshops to produce shipbuilding plate in TISCO. Its products, both in stainless steel and carbon steel, featured with steady quality and complete variety, have gained the approval from six Bureaus of Shipping and been widely applied in building different ships, ocean projects, boatyard, dock facilities, and etc. TISCO enjoys a good reputation among its users, which include well known Chuan Dong Shipbuilder of CSIC (China Shipbuilding Industry Corporation), Tianjin Xingang Shipbuilding Heavy Industry Co., Ltd., Shanhaiguan Shipbuilding Industry Co., Ltd., JinLing Ship Yard of CSC (Changhang Shipping of China), Yantai Laifushi Ocean Project Co., Ltd., and Jiangsu Dongfeng Industry Co., Ltd..

TISCO shipbuilding plate will take its advantage in producing stainless steel, pinch in chemical ship, special type ship and ocean project, and supply delicate steel plate for various ships.





研发能力 >>>

Research and Development

国家级实验室 National level laboratory







2009年在国家认定的575家企业技术中心中,太钢技术中心排名第2位。

Tisco technology center ranks 2th among enterprise-based 575 technology centers accredited by the state in 2009.

企业荣誉 >>>

Honors & Awards

- ◆《高质量不锈钢板材技术开发》获国家科技进步二等奖;
- ◆《AOD炉炉龄、工艺技术开发》等三项成果获山西省科技进步一、二等奖:
- ◆《太铜含氮不锈钢研制》等九项成果获冶金科学技术进步一、二、三等奖;
- ◆《双相不锈钢复合板》等六种产品分别获得国家重点新产品类、山西省优秀新产品奖;
- ◆ 不锈钢2B板被科技部认定为国家高新技术产品:
- ◆《AOD炉用氦气进行氦合金化工艺》《VOD冶炼不锈钢高碳区脱氦方法》等专利80余项;
- ◆ 不锈钢中板通过了TUV认证,并获得了冶金实物质量金杯奖;
- ◆ 双相不锈钢通过了中国船级社CCS认证。
- "Technical development of high quality stainless steel flat product" won second prize of state technical progresses.
- "AOD campaign, production technology development" and other two won the first and second prizes of Shanxi technical progresses.
- "Production technology and new grade development of Nitrogen-containing stainless steel by TISCO" won second prize of state technical progresses.
- Duplex stainless steel clad plate and so on six products were honored as among statewide new products and Shanxi great new products, respectively.
- Stainless steel 2B grade was approved by the Ministry of Science & Technology as the state hi-tech products.
- More than 80 patents such as "Nitrogen alloying process by nitrogen gas in AOD" and "Denitrification process in the phase of high carbon of stainless steel smelting in VODI.
- Stainless steel plate passed TUV examination and was rewarded Golden Cup of physical quality of metallurgical product.
- Duplex stainless steel passed CCS, China Classification Society, examination.







质量保证体系 >>>

Quality Assurance System

不锈钢产品船级社认证

Certifications of Stainless Steel Products from Bureaus of Shipping



碳钢产品船级社认证

Certifications of Carbon Steel Products from Bureaus of Shipping



PAGE\09-10

常规产品 >>>

Conventional Products

■ 不锈钢产品 Stainless Steel Products

◆ 品种 Variety

铜种 Steel grade	牌 号 Grade	規格 Specification	船规及标准 Ship specification and standard
	UNS \$30400, 304, 1.4301		
與氏体 不锈钢板	UNS \$30403 304L 1.4307 022Cr19Ni10 00Cr19Ni10		
Austenite Stainless Steel Plate	UNS \$31600, 316, 1.4401	1	接CCS, BV、GL、LR、
02.00430.000	UNS \$31603, 316L, 1.4404, 022Cr17Ni12Mo2, 00Cr17Ni14Mo2	6-40 × 1400-3000 × 4000-12000	DNV、ABS組規生产 Complied with the shipping standards as CCS, BV, GL,
双相	UNS \$31803, 1.4462, 022Cr22Ni5Mo3N, 00Cr22Ni5Mo3N		LR, DNV and ABS
不锈钢板 Duplex Stainless	UNS S32304、1.4362]	
Steel Plate	UNS \$32205 \ \$32101	1	21

◆ 化学成分(典型值) Chemical composition (Typical value)

牌号	化学成分% Chemical composition								
Grade	С	Si	Mn	Р	s	Cr	Ni	Мо	N
304	0.08	0.75	2	0.045	0.03	18.0-20.0	8.0-10.5	-	0.1
304 L	0.03	1	2	0.045	0.03	17.0-20.0	8.0-13.0	-	0.1
316 L	0.03	1	2	0.045	0.03	16.0-18.5	10.0-15.0	2.0-3.0	0.1
S31803	0.03	1	2	0.03	0.02	21.0-23.0	4.5-6.5	2.5-3.5	0.08-0.20
S32205	0.03	1	2	0.03	0.02	22.0-23.0	4.5-6.5	3.0-3.5	0.14-0.20
S32304	0.03	1	2.5	0.04	0.03	21.5-24.5	3.0-5.5	0.5-0.6	0.05-0.20
S32101	0.04	1	4.0-6.0	0.04	0.03	21.0-22.0	1.35-1.70	0.10-0.80	0.20-0.25

◆ 机械性能 Mechanical properties

钢种	0,2% 验证应力 (N/mm2)最小	1% 验证应力 (N/mm2)最小	抗拉强度 (N/mm2)最小	伸长率 % 最小	夏比V型缺口冲击试验 Charpy V-notch impact test		
Steel grade	Tested stress Minimum	Tested stress Minimum	Tensile strength Minimum	Elongation rate minimum	试验温度 Test temperature	級向 Longitudinal	模向 Transverse
304	205	245	515	40	-196	41	27
304 L	170	210	485	40	-196	41	27
316 L	170	210	485	40	-196	41	27
\$31803	450	-	620	25	-20	41	27
S32205	450		620	25	-20	41	27
S32304	550	-	795	15	-20	41	27
S32101	450	-	620	25	-	(4)	-

不锈钢焊接指南 Welding instruction for stainless steel

◆ 奥氏体焊接 Welding of austenite

铜种	Т	焊材型号 ype of welding materi	使用说明	
Steel grade	中国GB焊丝 Chinese GB welding wire	中国GB焊条 Chinese GB welding rod	美国材料AWS American material AWS	User manual
304	H00Cr21Ni10	E308L	308L	焊材的C、S、P、Si、Nb应尽可能低。 The contents of C, S, P, Si, and Nb in welding material should be as low as possible.
304 L	H00Cr19Ni12Mo2	H00Cr19Ni12Mo2	316	焊缝金属为316L的焊后状态,有时耐腐蚀性 欠佳,可通过1050−1100℃固溶处理来改善。 In case that welding seam metal is post–welded 316L, the anti–corression performance, which would be bad, can be improved through solution treatment under 1050−1100℃.

◆ 双相钢焊接 Welding of duplex

钢种 Steel grade	焊材型号 Type of welding material	热输入KJ/mm Heat input	层间温度 Weld Inter-pass Temperature	使用说明 User manual
\$31803	Cr22=Ni9=Mo3型超低碳 Cr22-Ni9-Mo3 Type Super Low Carbon	0.5=2.5	< 250°C	双相侧的焊接比较复杂,无论是对于焊缝还是焊接 热影响区,都希望焊后在高温区的冷却速度不要过 快,以便于快素体向奥氏体转变,而同时又希望焊 后在低温阶段冷却速度尽可能快,防止有害的金属 间化合物析出。 The welding of duplex is relatively complicated. Both for welding seam and welding heat-affected zone, the cooling of high-temperature zones after welding should not be too fast in consideration of the transformation of ferrite to austenite, at the same time, the cooling of low-temperature stage after welding is expected to be as quick as possible to avoid the adverse precipitation of inter-metallic compound.

PAGE\11-12

■ 碳钢产品 Carbon Steel

◆品种 Variety

钢种	牌号	規格	船规及标准
Steel grade	Grade	Specification	Ship specification and standard
一般强度船板 Shipping plate with general strength	A, B, D		按CCS、BV、GL、LR、 KR、ABS船械生产
高强度船板	AH32, AH36	2-40 × 1000-3000 × 6000-12000	Complied with the shipping standards
Shipping Plate with High Strength	DH32, DH36		as CCS, BV, GL, LR, DNV and ABS

◆ 化学成分(典型值) Chemical composition (Typical value)

一般强度船板 Shipping plate with general strength

单位:%

牌号 Grade	С	Si	Mn	Р	s	Als
A		≤0.50	≥2.5C			_
В	≤0.21		0.8-1.20	≈0.035	≈0.035	
D	1	≤0.35	0.6-1.20			≥0.015

高强度船板 Shipping plate with high strength

单位:%

牌号 Grade	С	Si	Mn	Р	s	Als	Nb	V	Tì	Cr	Ni
AH32, AH36 DH32, DH36	≤0.18	≤0.50	0.90-1.60	≤0.035	≤0.035	≥0.015	0.02-0.05	0.05-0.10	≤0.02	≤0.02	≤0.40

♦ 机械性能 Mechanical properties

		FF 5F 2V sh	44-44-20 sh	75 44 15	 	击功Akv,J, mpactenergy	≥ '	冷弯 Cold bending		
级别 Level	牌号 Grade	屈服强度 Yield strength MPa, ≽	抗拉强度 Tensile strength	延伸率 Elongation	试验温度	<	50			
	wira, > MPa	MPa	%≥	Test Temperature —	纵向 Vertical	横向 Horizontal	b=5a 120°			
ogth 1	A				20					
可被 General strength	В	235	400-520	22	0	27	20	-		
度 ge g	D]			-20	21	20			
	AH32	315	440-570	440-570 22	- 44	140 570	0	- 00-0		
高報	DH32	313			-20	31	22			
高 强 度	AH36		490-630		0			d=3a		
	DH36	355	190-030	21	-20	34	24			

碳铜船板焊接指南 Carbon steel welding instruction

A, B, D

◆ 焊接材料 Welding material

焊接方法	焊接材料			
Welding method	Welding material			
手工电弧焊 Hand Arc Welding 对于重要的结构可采用E4315、E4316、E5055、E5016;一般结构采用E4303 For the important structures, E4315, E4316, E5055, and E5016 can be applied; for general structures, E4303				
埋弧焊 Hidden Arc Welding H08A+HJ431(或HJ430)				
CO,气体保护焊	对于重要的结构可采用H08Mn2SiA;一般结构采用H08MnSi,H08MnSiA,H10MnSi,			
CO, Gas-shield Arc Welding	H08Mn2SiA is applied for important structure, and H08MnSi, H08MnSiA and H10MnSi can be applied for general structure			

◆焊接工艺 Welding process

(1) 手工电弧焊

主要根据焊件厚度、坡口形式、焊缝空间位置选择焊接工艺参数。

(2) CO,气体保护焊

(1) Hand Arc Welding

The welding parameters are depended on the thickness and chamfer type of welding part and position of welding seam.

(2) CO₂ Gas-shied Welding

焊丝直径 (mm) Welding wire diameter	板厚(mm) Plate thickness	焊缝位置 Welding seam position
1.0 ~ 1.4	6~8 6~12	全位置水平 Horizontal through the whole welding scar
1.6	6~12	水平、立、横、仰 Horizontal, vertical, transverse, upward
≥1.6	>6	水平 Horizontal

不同焊丝直径的合适焊接电流区间

Different welding wire diameters match to different welding current range

焊丝直径(mm)	焊接电流(A) Welding current				
Welding wire diameter	细颗粒过渡(30~45V) Fine grain transition	短路过渡(16 - 22V) Short circuit transition			
1.2	200 ~ 300	$100\sim175$			
1.6	350 ~ 500	120 ~ 180			
2.4	500 ~ 700	150 ~ 200			

AH32、AH36、DH32、DH36

◆ 焊接材料 Welding material

焊接方法 Welding method	爆 接 材 料 Welding material				
手工电弧焊 Hand Ass Welding	E5003、E5015、E5016 SJ501+H08A (成H08MnA); 不开坡口对接; H08MnA+HJ431(成HJ430); 开坡口对接; H08MnA(成H10Mn2)+HJ431(成HJ430、SJ301) SJ501+H08A (or H08MnA); butt welding without chamfer; H08MnA+HJ431 (or HJ430); butt welding with chamfer H08MnA (or HJ430, SJ301)				
埋弧件 Hidden Arc Welding					
CO,气体保护焊 CO, Gus-shield Are Welding	H08Mn2SiA, H08Mn2Si				

1、預热温度

焊前一般不预热,但在低温下焊接或焊接大刚性、大厚度结构件需要采用预热措施。

2、焊接工艺

由于此钢含有少量的V、T、N等细化晶粒的元素。同时为了降低淬硬倾向。防止冷裂纹的产生。选用 的焊接线能量可能偏大些。

1. Pre-heating Temperature

Normally preheating is not necessary for welding. But in case of low temperature or high rigidity parts or big thickness parts, preheating should be done.

2. Welding Process

As this steel grade contains a small quantity of V, T, and N, which are grain refiner elements, the input energy welding should be relatively higher. That is also good for reducing the tendency of harden quench and avoiding the generation of cold crack.

● 产品性能特点 Features of the product

太钢碳钢船板成分波动小,P、S含量低,钢质纯净,性能稳定,产品质量受到广大用户的好评。太钢配套建有德国进口的横切机组,可以生产6-40×1000-3000×6000-12000中板和2.0-25×1500-2130×6000-12000mm的切边板,切边板矫直后的平直度和残余应力可达到最好水平,可保证钢板纵向分条后没有变形产生,产品质量在国内同类产品中属于佼佼者。

TISCO's carbon shipping plate, with relatively stable composition, low content of P and S, pure steel quality and reliable performance, has widely gained good comments among our customers. Equipped with crosscutting machine imported from Germany, TISCO owns the capacity of producing medium plate of 2–40 × 1000–3000 × 6000–12000 and sheared plate of 2.0–24 × 1500–2130 × 6000–12000mm. By straightening, the flatness and remain stress of sheared plate will reach top class level; no deformation will happened after the plate being longitudinally divided. The quality of product ranks top among domestic alike products.

配套产品目录 Other products catalog

● 不锈钢类 Stainless steel

牌号 Grade 厚度 Thickness		规格(mm) Specifications		标准	交货状态	主要用途	
	厚度 Thickness	宽 度 Width	长度 Length	Standard	Delivery	Application	
0Cr18Ni9 00Cr19Ni10	6~40	1500~2000	4000~8000	GB/T4237=92	固溶酸洗 Solution and pickling	用于一般化工设备等。 Used for general chemical industry equipment.	
1Cr18Ni9Ti 0Cr18Ni10Ti	6~40	1500~2000	4000~8000	GB/T4237=92	固溶酸洗 Solution and pickling	耐晶间腐蚀性较好部件。 Used for parts with relatively good inter-crystalline corrosion resistance properties.	
0Cr17Ni12Mo2 00Cr17Ni14Mo2	6~40	1500~2000	4000~8000	GB/T4237-92	固溶酸洗 Solution and pickling	用于抵抗硫酸、磷酸、甲酸、乙酸的设备。 Used for equipments that required for vitriol- resistance, phosphoric acid resistance, formic acid resistance or acetic acid resistance.	
9Cr18Ni12Mo2Ti	6~40	1500~2000	4000~8000	GB/T4237=92	國際酸洗 Solution and pickling	用于一般化工设备等。 Used for general chemical industry equipment.	
1Cr18Ni12Mo2Ti	6~40	1500~2000	4000~8000	GB/T4237=92	固溶酸洗 Solution and pickling	用于一般化工设备等。 Used for general chemical industry equipment.	
06Cr19Ni10 022Cr19Ni10	6~40	1500~2000	4000~8000	GB/T4237=2007 GB/T4238=2007	固溶酸洗 Solution and pickling	主要用于耐点蚀材料。 Used for materials that required good pitting resistance property.	
06Cr17Ni12Mo2 (0Cr17Ni12Mo2) 022Cr17Ni12Mo2 (00Cr17Ni14Mo2)	6~40	1500~2000	4000~8000	GB/T4237-2007	国溶酸洗 Solution and pickling	用于抵抗硫酸、磷酸、甲酸、乙酸的设备。 Used for equipments that required for vitriol- resistance, phosphotic acid resistance, formic acid resistance or acetic acid resistance.	
06Cr17Ni12Mo2Ti	6~40	1500~2000	4000~8000	GB/T4237-2007	國溶酸洗 Solution and pickling	耐晶间腐蚀性较好部件。 Used for parts with relatively good inter-crystalline corrosion resistance properties.	
06Cr18Ni11Ti (0Cr18Ni10Ti)	6~40	1500~2000	4000~8000	GB/T4237-2007	國溶酸洗 Solution and pickling	用于要求耐蚀性好、成型性优良的材料等。 Used for materials that required good anti-corrosion property and good formability.	
0Cr18Ni9 (封头)	6~20	1600上	4000 <u>L</u>	Q/TB3060-2008	固溶酸洗 Solution and pickling	适用于制作罐体封头等。 Used for pot plugs.	
ICr18Ni9Ti(封头)	6~20	1600上	4000上	Q/TB3060-2008	國溶酸洗 Solution and pickling	适用于制作罐体封头等。 Used for pot plugs.	

PAGE\15-16

船舶行业用铜

● 碳钢类 Carbon steel

钢种 牌号 Steel Grade	牌号	规 格 Specifi	(mm) cations	标 准	主東田治
	厚度 Thickness	宽 度 Width	Standard	主 要 用 途 Application	
优碳钢 Premium Carbon Steel	STB410	3.0-8.0	900-1320	Q/TB3007=2007	中压锅炉管用锅 Intermediate Pressure Boiler Tube Steel
低合金 Low Alloy Q345 (A.B.C.D)	0345 (ABCD)	≥2.5-4.4	900-1800	≤4.0执行GB/T912=1989	结构用钢 Structural Steel
	QS43 (A.B.C.D)	>4.4-20.0	900-2130	>4.0执行GB/T3274-2007	
耐候例 09CuPCrNi-A Weather Proof Steel (Q345GNHL)	09CuPCrNi-A	≥3.0-7.0	900-1320	TB/T1979-2003	耐大气腐蚀用钢 Atmospheric Corrosson Resistant Steel
	(Q345GNHL)	>3.0=12.0	1440-1550	18/119/9=2003	
花纹板 Checkered Plate H=Q235A	H=Q235A(A.B.C)	≥2.35=3.0	900-1250	GB/T3277=1991	一般结构用铜 General Structural Steel
	n-q235A(A.B.C)	>3.0=8.0	900-1300		
压力容器 用板和锅炉 用板 Pressure Vessel Plate and Boiler Plate	Q345R, 245R	6.0-20	1000-2000	GB713-2008	中常温压力容器受压元件用 Pressure Parts Steel for Pressure Vessel
	SA414-G	2.4-6	900-1380	Q/TB3077-2008	under Intermediate and Common Temperature

产品应用 >>>

Application













PAGE\17-18

服务承诺 >>>

Service Promise

- 为客户提供个性化成份、性能、包装、卷重、质保书的设计。
- 为客户在选材和加工工艺方面提供技术支持。
- 交货准确及时。
- 对客户异议。在24小时内答复。
- O Provide for consumers with the personalized designs on composition, properties, package and the quality certificate.
- Technical support to customers in material selection and fabrication.
- Accurate and prompt delivery.
- Response to customer's claim within 24 hours.



合作伙伴 >>>

Cooperative Partner





中国船舶工业集团公司









主要业务部门联系方式 >>>

Contacting Manners of the Main Business Sections

股份公司主要业务部门 Main business department of Co.,Ltd	业务功能 Functions	联系电话 Telephone	E-mail Zhangwl@tisco.com.cn Tgyhfwk@tisco.com.cn Tggm@tisco.com.cn	
容情部 Marketing Department	合同管理、订货、异议、 投诉受理及出口贸易 Contract and order management Complaint and claim handing Exports business	0351-3014366 0351-3011432 800-806-1998 +86 (0)351-3017169 +86 (0)351-3017525		
技术中心 Technology center	技术咨询服务 Technical consultation service	0351-3012213	Tgjszxbxg@tisco.com.cn	

国际分公司联系方式 Contacting manners of international trading Co., Ltd.

太铜国贸(美国)有限公司 Trigging International Tracing (USA) Co., Ltd.	美国 USA	电话 (Tel) 001-4124340607	传真(Fax)001-4124340608
太钢国贸(香港)有限公司 Taigang International Trading (Hongkong) Co., Ltd.	香港 Hongkong	电话(Tel)+0852-28271686	传真 (Fax)+0852-28271300
太钢欧洲有限公司 Taigang Europe Co., Ltd.	德国 Germany	电话 (Tel) +49(0)2154-81690	传真 (Fax)+049-2154-816911

国内分公司联系方式 Contacting manners of deomestic trading Co.,Ltd

	公司名称 Branch Name	地址 Address	通讯方式 Telephone & Fax		
太钢华北区销售公司 TBCO sales company in North China	大津太陽陽像有際公司 Targe TRICO Rates Co. List 北京太勢開售有限公司 Repring TRICO Rates Co. List 太朝現質開售有限公司 Spell Rates company List of TRICO 原代大朝朝着有限公司 20mg/htm 1820 Rates Co. List	大津 There's 北京 Englany 太郎 Teleparen 原約 Zhangarana	电波 Tel 022-2430e+05 郵帳 Post code 300012 电波 Tel 010-6444366 郵帳 Post code 30029 电波 Tel 0351-306686 影帳 Post code 030003	作業 Fax 022-24308103 作業 Fax 010-64441369 作業 Fax 0351-3090556	
太钢东北区销售公司 ISCO sales company in Northwest of China	辽宁太朝销售有限公司 Linearing TERCO Refers Co. Link 统尔波太朝销售有限公司 February TERCO Refers Co. Link	世界 Statement 哈尔滨 Hamilton	电波 [Tel] 024-24232050 郵編 [Post code] 110016	作賞 Fox 034-24231216	
太钢华东区销售公司 ISCO sales company in East China	定樣太智等售有限公司 West TRICO Robes Co. Line. 上海太智等售有限公司 Rhompful TRICO Robes Co. Line. 枚州太智等售有限公司 Hompsten: TRICO Robes Co. Line.	光镜 Wast 上海 Ehongisti 竹詞 Hangahou	电源 Tel 0510-82407712 郵偏 Post code 214011	传真 Fax G510-92441187	
太钢山东区销售公司 TISCO sales company in Shandong	青岛太陽陽青海染公司 Gregoline TRICO Rates Co. Lini. 済海太陽陽青海染公司 Junto TRICO Rates Co. Lini.	音码 Gregorisco S内面 Joses	电波 Tel) 0532-81101947 郵偏 Post code 399300	传真 Fax 0532-87734796	
太钢华中区销售公司 (ISCO sales company in Central China	東汉太陽陽舊有際公司 Warter TIDEO Sales Ca. List. 松沙太陽陽舊有際公司 Drangeles TBEO Sales Co. List.	武汉 Walter 年分 Distrigates	包装(Tel)027-85615300 郵偏(Post code)430015	作真 Fax 027-95615311	
太钢华南区销售公司 ISCO sales company in South China	情山(下土勢不健明間告有限公司) Franker (TRICO State Seas State United 概取上明間告有限公司 Jacyang TRICO States Co. Link	例は Poster 規則 Jayang	电波 Tel 0757-83315711 郵稿 Post code 529341	作真 Fax 0757-92315718	
太钢西南区销售公司 ISCO sales company in Southwest of China	成都太陽陽香有除公司 Deregals 18DD Sales Do List 童庆太陽陽香有除公司 Drengging 18DD Sales Do List	读都 Changda 重庆 Changeing	电波 Tel 029-87604342 影倫 Post code 610036	作真 [Fax] 028-87612940	
太钢西北区销售公司 ISSO sales company in Northwest of China	海安太陽陽舊有際公司 Star TEECO Sales Co. Uni.	西安 Stan	包括 Tel) 029-86291507 郵稿 Post code) 710016	作真 Fex G29-96231506	