



不锈钢热轧板 (卷)

HOT-ROLLED STAINLESS STEEL PLATE (COIL)

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太原钢铁 (集团) 有限公司
TAIYUAN IRON & STEEL (GROUP) CO.,LTD.

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企业使命

用不锈钢智慧创造卓越品质

Enterprise Mission

To pursue outstanding quality with innovative and stainless wisdom

战略目标

建设全球最具竞争力的不锈钢企业

Strategic Target

Building TISCO into the Most Competitive stainless steel
Producer in the World

核心价值观

以人为本 用户至上 质量兴企 全面开放 不断创新

Core Values

Relying the People, Putting Customers' Needs First, Rejuvenating
Enterprise through Quality, Fully Opening, Keeping Innovative

营销理念

为用户提供更全、更好、更快的解决方案
在长期合作中实现共赢

Management Concept

Providing Customer with Better and Faster Solution Package
to Realize Long-Term Win-Win Cooperation

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



太钢是全球最大、工艺技术装备水平最高、品种规格最全的不锈钢企业，具备年产1200万吨钢（其中400万吨不锈钢）的能力，营业收入连续六年超过1000亿元人民币。

太钢致力于不锈钢、特殊钢和高等级碳素钢的研究开发和生产加工，拥有雄厚的研发实力和可靠的质量保障能力。

太钢技术中心在全国729家国家认定企业技术中心中排名第二。目前已形成了以不锈钢、冷轧硅钢、高强韧系列钢材为主的高效节能长寿型产品集群，重点产品批量进入石油、化工、造船、集装箱、铁路、桥梁、汽车、城市轻轨、大型电站、“神舟”系列飞船等重点领域和新兴行业。铁路行业用钢、双相钢、耐热钢、车轴钢、9%Ni钢等30多个品种国内市场占有率第一。

“十二五”期间，太钢将以科学发展为主题，以转型发展为主线，以科技创新为动力，以能力建设为核心，以队伍建设为保障，全面推进“三个转变”，坚持做强主业、多元发展、延伸发展、绿色发展、和谐发展，建设全球最具竞争力的不锈钢企业，到2015年，营业收入达到2000亿元以上，成为国内一流、世界著名的大型企业集团。

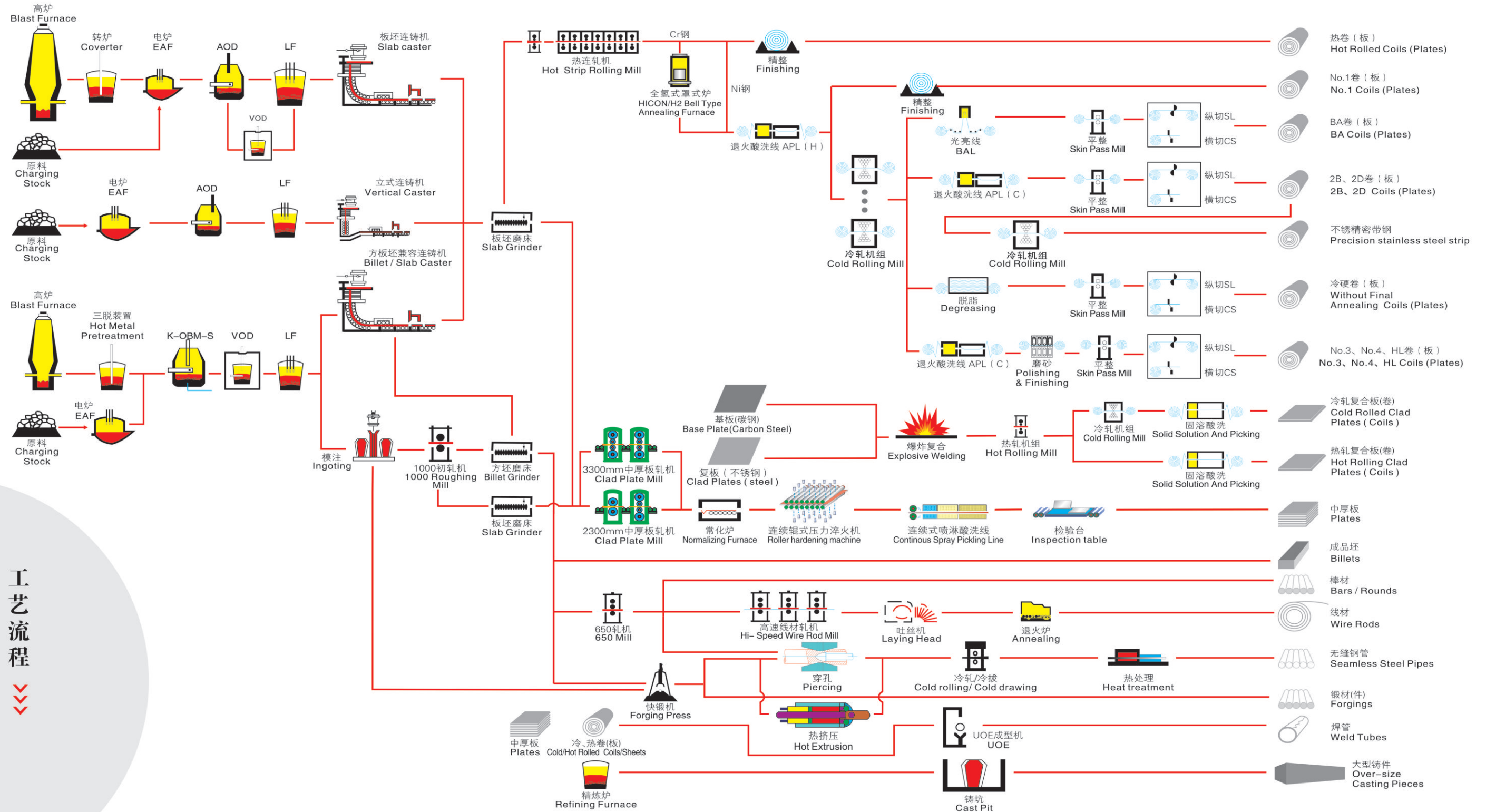


As the biggest stainless steel enterprise equipped with globally biggest capacity and most up-to-date technology and equipment, TISCO has developed into an extraordinary large scale iron and steel complex, which is integrated with businesses of iron mining, iron and steel production, processing, delivery and trading. Now, TISCO's annual production capacity is 12 million tons (of which 4 million tons of stainless steel), its operating income surpasses 100 billion Yuan RMB in the past six consecutive years.

TISCO has been devoted to R & D, production and processing of stainless steel, special steel and high grade carbon steel. The company has enormous R & D force and reliable quality assurance system. Among 729 State determining enterprise technical centers, TISCO Technology Center ranks the second. Now, TISCO has formed an energy-efficient longevity products cluster mainly in stainless steel, cold rolled silicon steel, high-strength-toughness series steel, and key products have entered into key fields and new industries such as petroleum, chemical industry, shipbuilding, container, railway, bridge construction, automobile, urban light rail transit, large power stations, "Shenzhou" series airships and etc. TISCO ranks the domestic first in market shares of railway industry steel, duplex steel, heat-resistant steel, axle shaft steel, etc.

During "the twelfth five-year" period, taking scientific development as the theme, transformation development as the main line, technological innovation as a driving force, the ability construction as the core, and team building as guarantee, TISCO will continue to promote the "three transformations", adhere to the strengthen the main business, with diverse development, extension development, green development and harmonious development, speed up the construction of the world's most competitive stainless steel enterprises. Up to 2015, with business income expecting to reach over 200 billion Yuan, build TISCO to the domestic first-class, the world famous large enterprise group.





工艺流程



荣誉证书 >>>

Honors & Awards



质量保证体系 >>>

Quality Assurance



研发能力 >>>

Research and Development



National level laboratory
国家级实验室



在2011年国家认定的729家企业技术中心中，太钢技术中心排名第2位，行业排名第一。
In 2011 Tisco technology center ranks in NO.2 position among the 729 state certified enterprise technology departments, and sitsues the NO.1 among the steel industry.



扫描电镜
Scanning Electron Microscope



透射电镜
Transision Electrom Microscope



热模拟试验机
Thermal Simulating Tester



全自动电子拉伸试验机
Automatic electronic tensile tester

产品应用 >>>

Applicatons

◆ 太钢采用世界上最先进的工艺装备和不锈钢单张热轧工艺生产的超宽厚不锈钢热轧板，具有性能优、尺寸精、规格全、表面好等优点，产品广泛用于各行各业，为国家核工业、重点水利水电、造船、化工等领域作出巨大贡献。

◆ 以预处理铁水为原料，采用顶底复吹脱磷转炉、大容量UHP交流电弧炉及大容量AOD炉、钢质纯净度高、成份控制稳定。

◆ 采用最先进的常化处理及辊式淬火，中厚板性能优良，横、纵向性能差异小，耐腐蚀性好，适合各种焊接工艺。

◆ 采用高强度压下自动控制系统，厚度精度高。

◆ 水下等离子切割，具有切边好，无污染，板型好等优点。

◆ TISCO produced superwide thick stainless steel plate, using HR single-piece technology on the most sophisticated equipment, is super in properties, dimension, specification and surface finish. Wide application is found in nearly every industry and trade and great contribution made to the domestic nuclear industry success, major hydroelectric and water conservation projects, shipbuilding and shemical industries.

◆ Steel is pure and composition stable thanks to the use of pretreated hot metal as raw material and melting and refined by K-OBM-S De-P converter, ultra-capacity UHP AC EAF and AOD.

◆ Since the use of most advanced normalizing and roller hardening process, the medium plate thus produced comes with excellent properties, less longitudinal and latitudinal variaion, good resistance to corrosion, adaptability to different welding technologies.

◆ Thickness precision is highly benefited form the high reduction automatic control system.

◆ Underwater plasma cut makes fine cut edge and good flatness, without any pollution.

煤化工
Coal Chemical industry



石油钻井平台
Oil drilling platform



石化
Petrochemical



储罐
Storage tank



罐箱
Tank Container



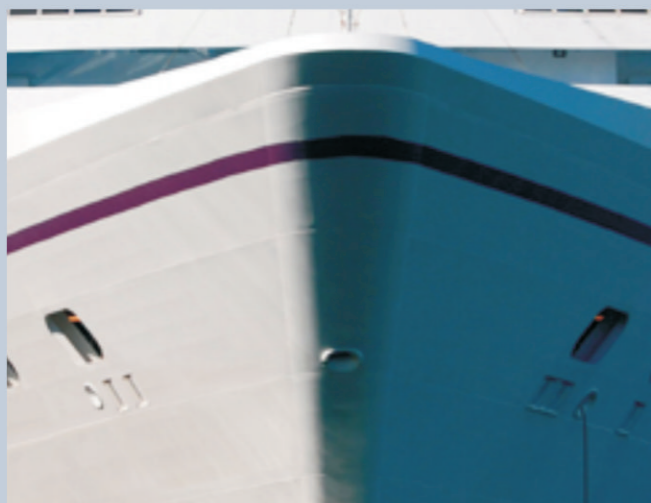
造船
Shipbuilding



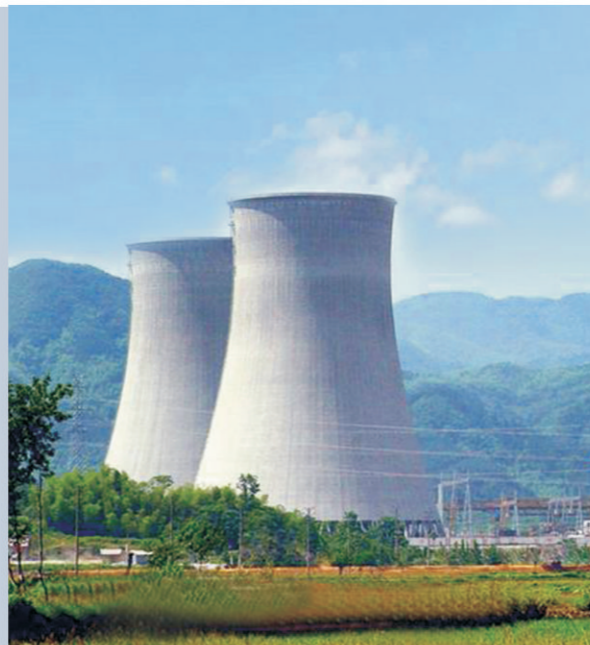
罐体
Tank



造船
Shipbuilding



火电
Thermal power



水力水电
Hydroelectric



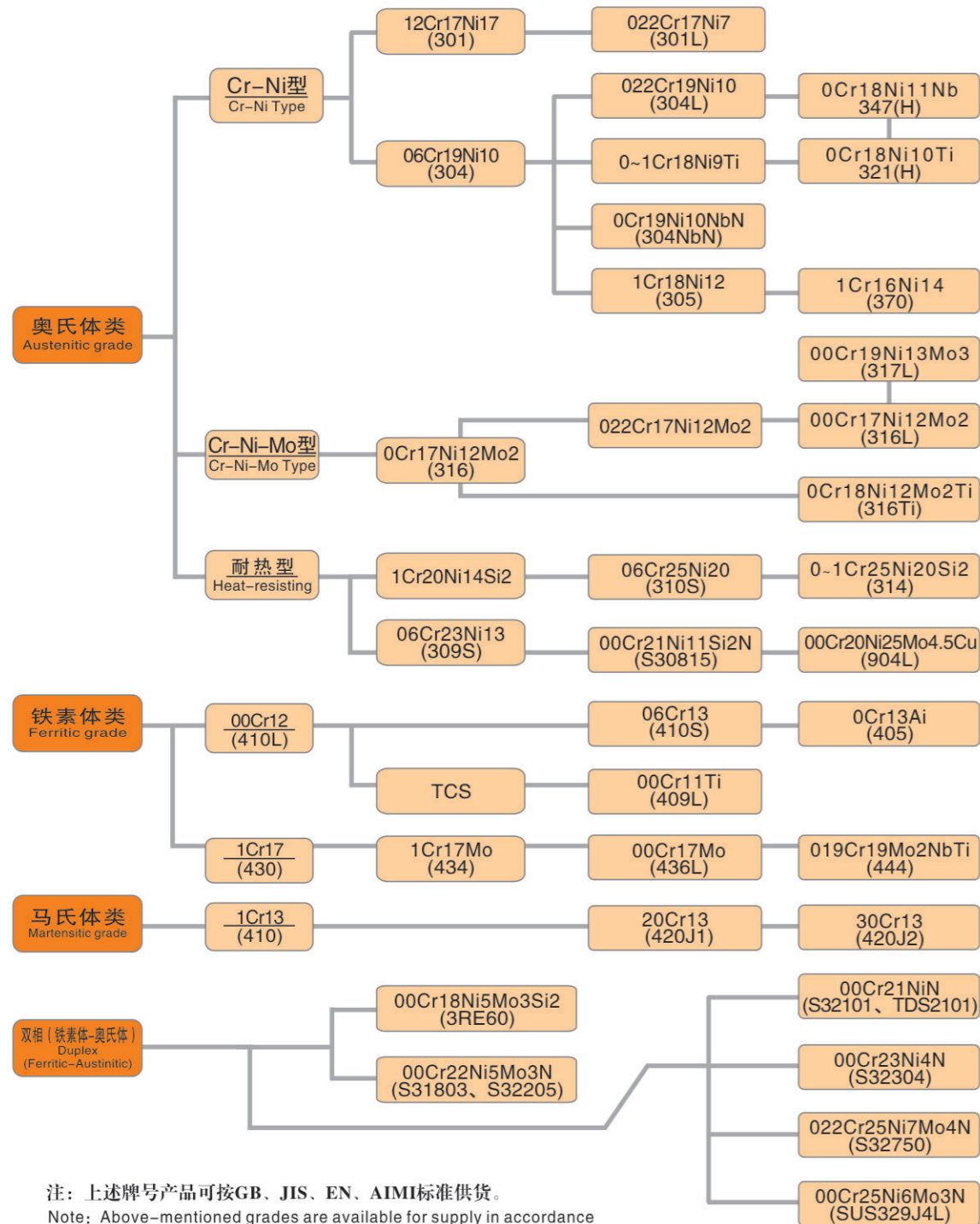
核岛堆芯板
The core plate of nuclear island



主要产品 >>>

Main Products

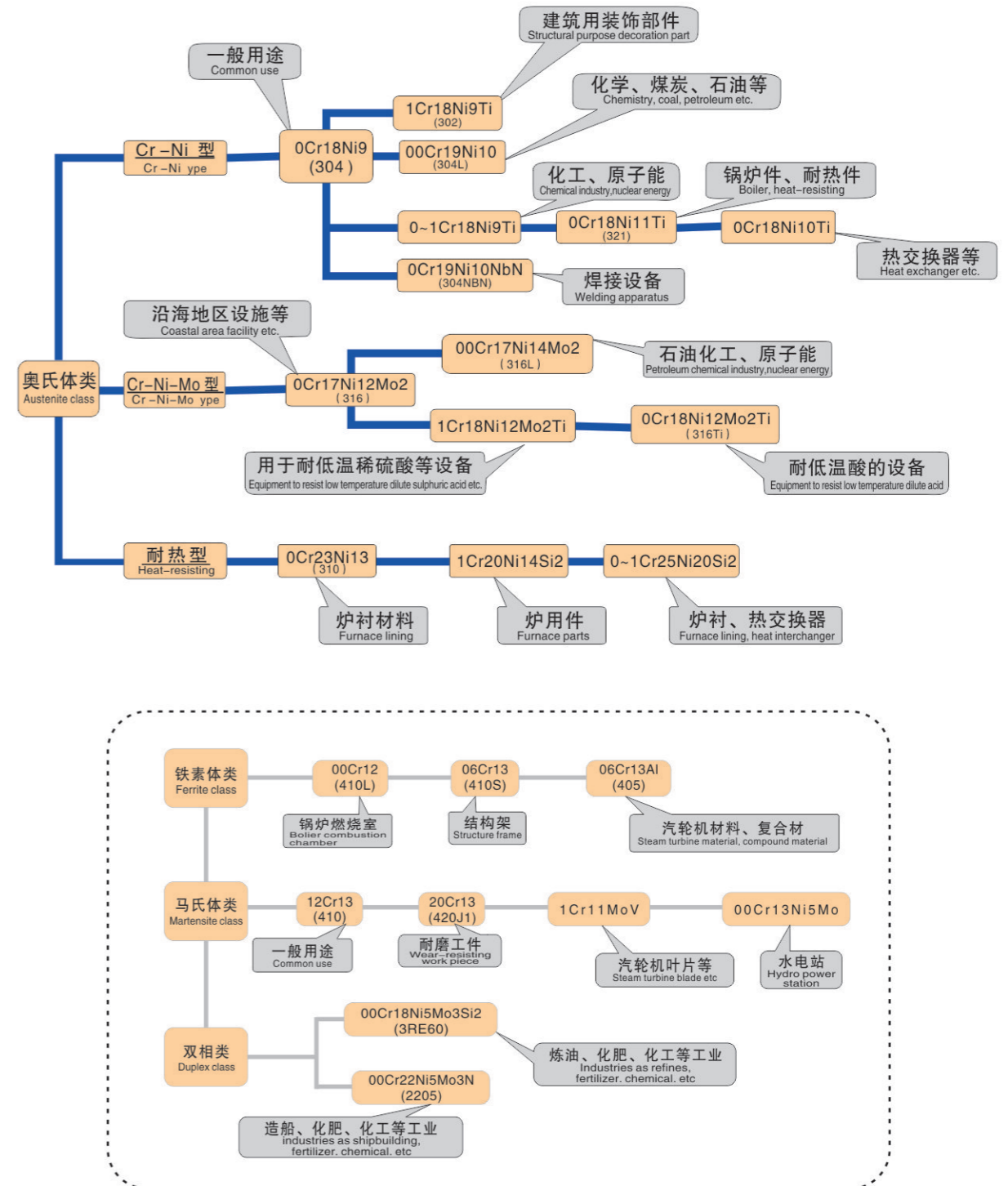
◆ 产品牌号 Steel Grades



注: 上述牌号产品可按GB、JIS、EN、AIMI标准供货。
Note: Above-mentioned grades are available for supply in accordance
With GB、JIS、EN、AISI standards.

主要产品 >>>

Main Products



◆ 不锈钢牌号对照表 Stainless Steel Grades Comparison

中国标准 Designation in China standard		欧标 Designation in European standard	美标 Designation in USA standard	主要成份 Main composition
新牌号 New version	旧牌号 Old version			
12Cr17Ni7	1Cr17Ni7	1.4319	301	17Cr-7Ni
022Cr17Ni7	00Cr17Ni7	1.4318	301L	LC-17Cr-7Ni
06Cr19Ni10	0Cr18Ni9	1.4301	304	18Cr-8Ni
022Cr19Ni10	00Cr19Ni10	1.4307	304L	LC-18Cr-9Ni
0Cr18Ni10Ti	0Cr18Ni10Ti	1.4541	321	18Cr-9Ni-Ti
06Cr19Ni10N	0Cr19Ni9N	—	304N	18Cr-8Ni-N
06Cr19Ni9NbN	0Cr19Ni10NbN	—	—	18Cr-9Ni-Nb-N
0Cr18Ni11Nb	0Cr18Ni11Nb	1.4550	347	18Cr-11Ni-Nb
1Cr18Ni12	1Cr18Ni12	1.4303	305	18Cr-12Ni
—	1Cr16Ni14	—	—	16Cr-14Ni
0Cr17Ni12Mo2	0Cr17Ni12Mo2	1.4401	316	17Cr-12Ni-2Mo
022Cr17Ni12Mo2	00Cr17Ni14Mo2	1.4404	316L	LC-17Cr-12Ni-2Mo
022Cr19Ni13Mo3	00Cr19Ni13Mo3	1.4434	317L	LC 19Cr 13Ni 3Mo
06Cr17Ni12Mo2Ti	0Cr18Ni12Mo3Ti	1.4571	316Ti	18Cr-12Ni-2Mo-Ti
06Cr23Ni13	0Cr23Ni13	1.4950	309S	23Cr-13Ni
06Cr25Ni20	0Cr25Ni20	1.4951	310S	25Cr-20Ni
16Cr25Ni20Si2	1Cr25Ni20Si2	—	314	25Cr-20Ni-2Si
—	0Cr21Ni11Si2N	1.4835	S30815	21Cr-11Ni-2Si-N
—	0Cr20Ni25Mo4.5Cu	1.4539	904L	20Cr-25Ni-4.5Mo-Cu
022Cr12	00Cr12	—	410L	LC-12Cr
022Cr11Ti	00Cr12Ti	1.4512	409L	LC-12Cr-Ti
06Cr13	0Cr13	1.4000	410S	13Cr
06Cr13Al	0Cr13Al	1.4002	405	13Cr-Al
10Cr17	1Cr17	1.4016	430	17Cr
—	00Cr17Mo	—	436L	LC-17Cr-Mo
019Cr19Mo2NbTi	00Cr18Mo2	1.4521	444	LC-18Cr-2Mo
022Cr17Ti	00Cr17Ti	—	439	LC-17Cr-Ti
—	TTS443	—	—	21Cr-Ti
12Cr13	1Cr13	1.4006	410	0.1C-13Cr
20Cr13	2Cr13	1.4021	420J1	0.2C-13Cr
30Cr13	3Cr13	1.4028	420J2	0.3C-13Cr
—	00Cr21NiN	1.4162	S32001	LC-21Cr-Ni-N
—	00Cr23Ni4N	1.4362	S32304	LC-23Cr-4Ni-N
022Cr22Ni5Mo3N	00Cr22Ni5Mo3N	1.4462	2205	LC-22Cr-5Ni-3Mo-N
022Cr25Ni7Mo4N	00Cr25Ni7Mo4N	1.4410	S32750	LC-25Cr-7Ni-4Mo-N
TD305B	—	—	—	19Cr-13Ni-4Si

主要产品 >>>

Main Products

◆ 产品规格 Product Specification

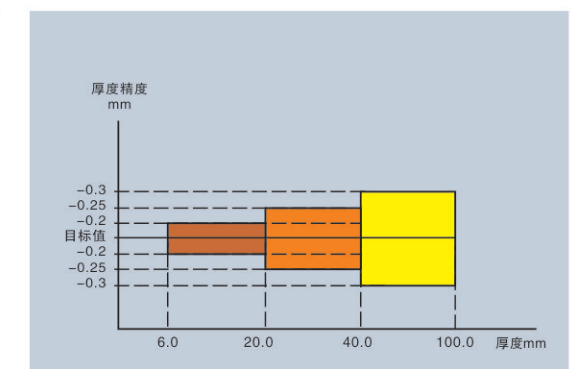
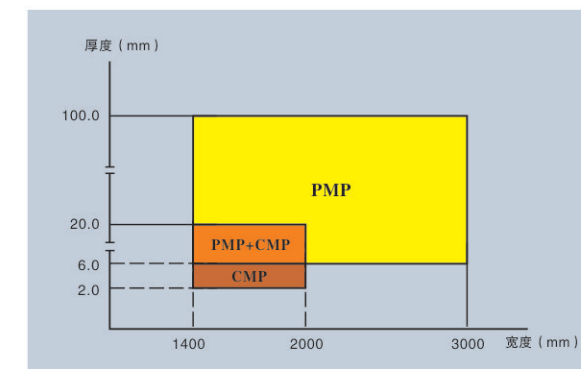
产品 Product	厚度 (mm) Thickness	宽度 (mm) Width	长度 (mm) Length
PMP	6.0~100.0	1500~3000	2000~12000
CMP	2.5~20.0	1000~2000	2000~12000

注：可依用户要求双定尺交货。 Note: Double length delivery is possible if requested.

◆ 尺寸精度 Dimensional Precision

产品 Product	钢板厚度 (mm) Thickness	厚度允许公差 (mm) Allowable Thickness tolerance
CMP	2.5~20.0	± 0.4
PMP	6.0~20.0	± 0.5
	20.0~40.0	-0.5~+0.8
	40.0~100.0	-0.5~+1.0

项目 Item	精度 (mm) Precision
宽度精度 Width Precision	0~+10
长度精度 Length Precision	0~+25
对角线 Diagonal Precision	≤10
垛板精度 Stacking Accuracy	沿长度方向 (Lengthwise) : 0~3.0 沿宽度方向 (Widthwise) : 0~2.0



产品优势 >>>

Advantages of Product

◆ 规格优势 Size Benefit:

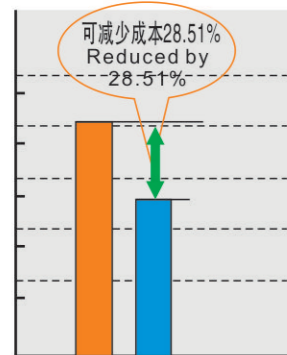
可保证超宽厚热轧板常化、矫平、定尺。

Guarantee if made of superwide thick plate for normalizing, leveling and size cut.

例：以大型玉米深加工企业的发酵罐体制作为例，罐体直径为9m，罐体高为22m，罐壁平均厚度为14mm，不同板幅对应的焊接成本比较；

Example: taking a ferment tank used by an giant corn processing plant to compare the welding costs where different sizes of plate are used, The tank in 9m diameter and 22m high, and 14mm for average wall thickness.

不锈钢规格 Stainless steel specification		普通板幅 (mm) Regular size(mm)	超宽板幅 (mm) Superwide size(mm)
罐体环缝 Tank body vertical joint		12条 (Welds)	9条 (Welds)
	数量 Qty.		
	长度 Length	339m	254m
罐体环缝 Tank body vertical joint		55条 (Welds)	24条 (Welds)
	数量 Qty.		
	长度 Length	110m	67m
焊缝总长 Total weld length		449m	321m
选择超宽幅的不锈钢板，罐体焊接成本同比减少28.51%。 Where the superwide stainless steel plate is used, tank welding cost can be reduced by 28.51%.			



选择太钢超宽厚不锈钢热轧板：

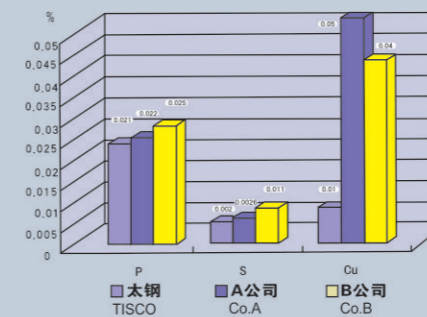
- 可减少焊缝数量，降低金属消耗，节约成本；
- 可实现大型设备的一次选材，满足用户的特种需求；
- 可提高设备运行的安全性，降低维护费用；
- 可降低工人劳动强度，改善工作环境。

To choose TISCO's super-wide hotstainless plate for the benefits of:

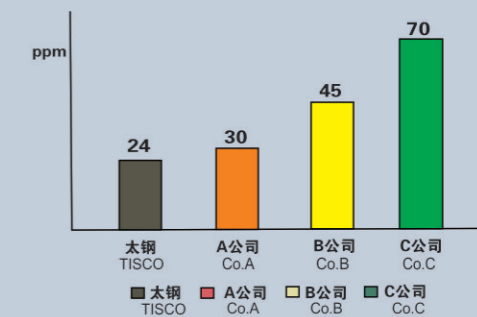
- Reducenumberof welds that minimizes metal loss and therefore the cost;
- Satisfaction to customcr's special requirement by ready masterial for oversize equipment;
- Enhanced safety of equipmctn operation at lower maintenance cost;
- Lcss labor intensity and improved working envionment.

◆ 钢质纯净度 Steel Purity

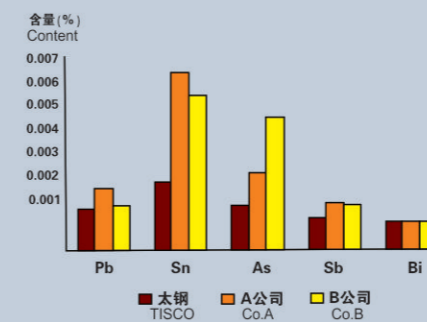
A、成品P、S、Cu含量的对比
P,S,Cu comparison if finished products



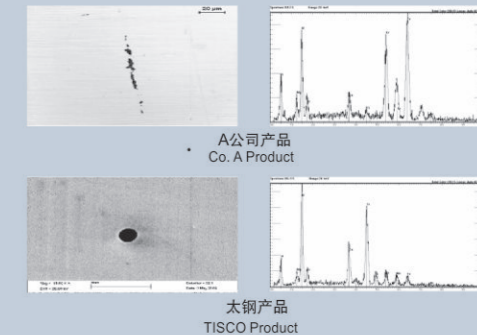
B、[O]含量对比
[O]comparison



C、五害元素含量对比
Comparison of 5 harmful elements

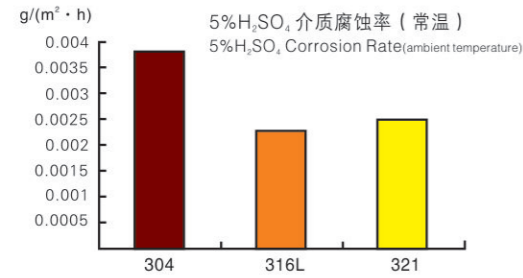


D、夹杂物数量、形态和尺寸对比
Impurities comparison of quantity, shape and size

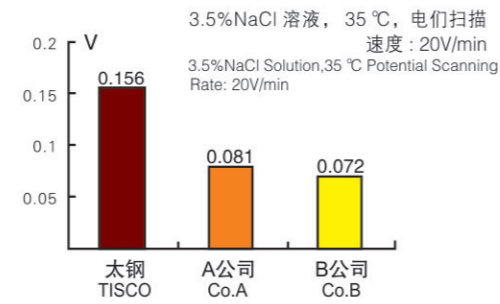


◆ 耐蚀性能 Corrosion-resisting Performance

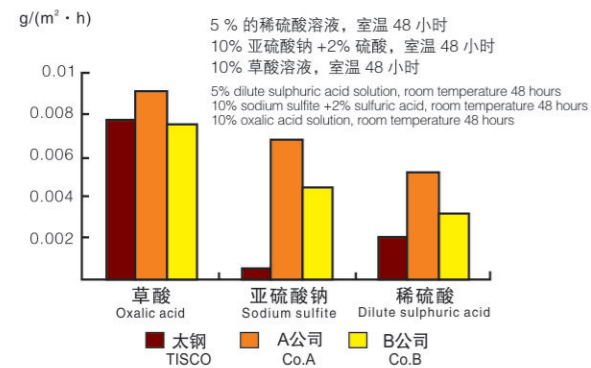
A、典型钢种耐蚀性能差异
Corrosion Resisting Performance Difference at Typical Grades



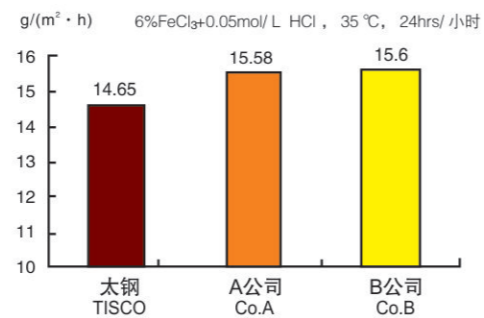
B、电位差对比 (304)
Potential Difference Comparison (304)



C、304中板均匀腐蚀对比
304 Medium Plate Even Corrosions Comparison



D、304中板点蚀对比
304 Medium Plate Spot Comparison



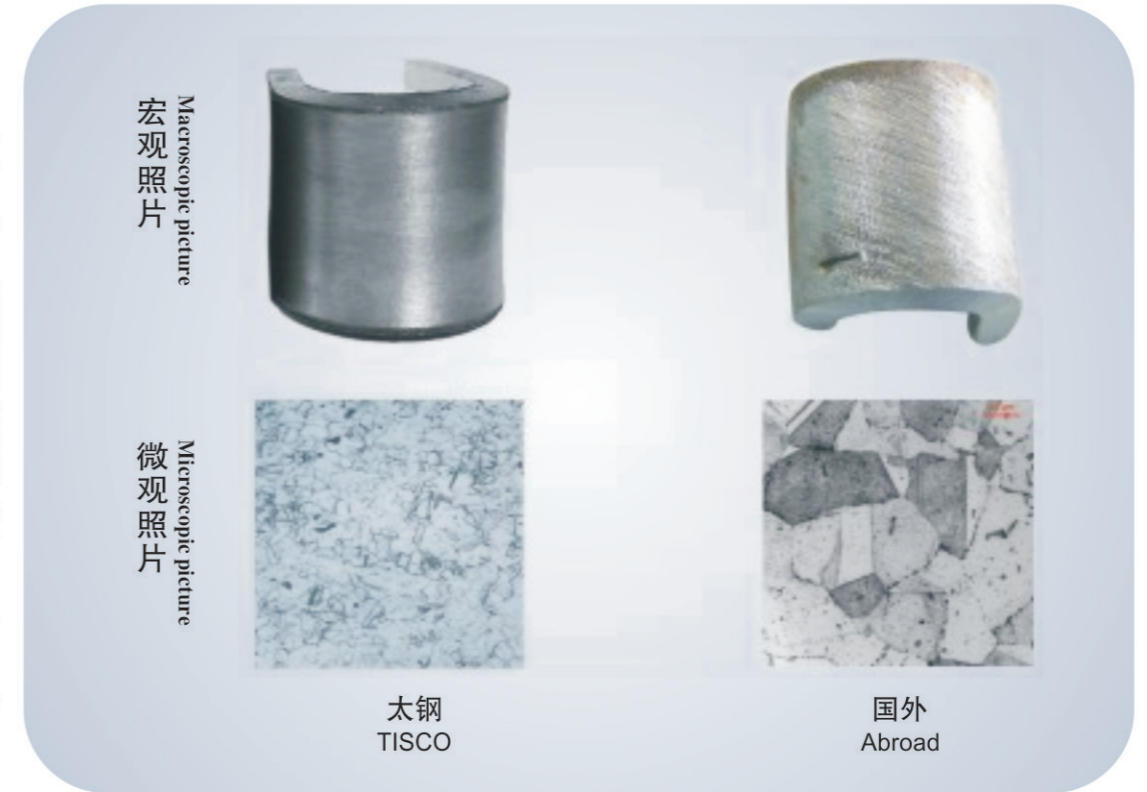
D、304中板盐雾对比
304 Medium Plate Salt Mist Comparison

5%NaCl, 连续喷雾96小时太钢与B公司不锈钢中板相比产品较好, 96小时无锈痕, A公司产品86小时可见明显锈痕。

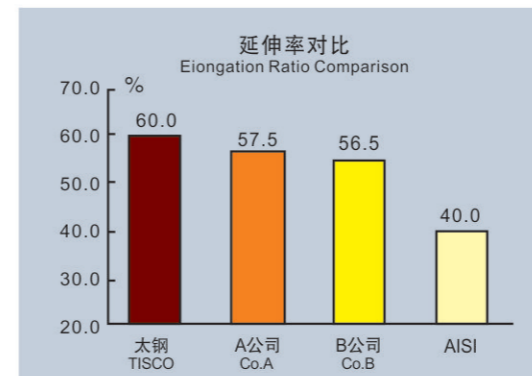
5%NaCl, continuously sprays for 96 hours, TISCO products show better performance than that of Co.B, with on rust mark, Co.A product displays visible rust mark.



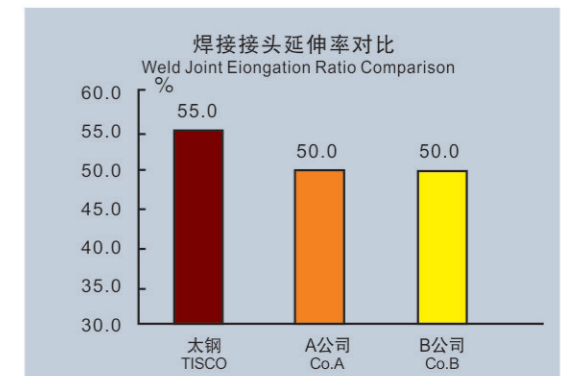
超级304COLD CASE2328-1晶间腐蚀后照片
A photo of super304COLD CASE2328 with inter-grain corrosion



◆ 机械性能 Mechanical Performance



◆ 焊后性能 Performance after Welding



材质304
304 Material quality

主要业务部门联系方式 >>>

包装 >>> Packaging

中板包装采用防水材料，加装支架防止钢板变形。

Waterproofing material for medium plate packaging, supporting frame to prevent plate from deformation.



服务承诺 >>> Service Commitment

- 为客户提供个性化成份、性能、包装、卷重、质保书的设计。
- 为客户在选才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。
- 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 with in 24 hours



Contacting Manners of the Main Business Sections

主要业务部门 Main business department	业务功能 Functions	联系电话 Telephone	E-mail
营销部 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	0351-3018888-8133 0351-3018888-8130 0351-3018888-8131 400-653-1998 800-806-1998	wangyf@tisco.com.cn malc@tisco.com.cn huangtao@tisco.com.cn tghwb@tisco.com.cn
技术中心 生产技术部 Technology Center	技术咨询服 Technical consultation service	0351-3012213	wangzb@tisco.com.cn

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

太钢国贸(美国)有限公司 Taigang International Trading (USA) Co.,Ltd.	美国 USA	电话(Tel) 001-4124340607	传真(Fax) 001-4124340608
太钢进出口(香港)有限公司 TISCO STAINLESS STEEL (H.K.) LTD.	香港 Hongkong	电话(Tel) +0852-28681819	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) +49-2154-816911

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	
山西区销售公司 TISCO sales company in Shanxi	太原 Taiyuan 定襄 Dingxiang	电话(Tel) 0351-3096390	传真(Fax) 0351-3090556
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