Cold Rolled Steel Sheet

冷轧薄板
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冷轧薄板厂简介

Brief introduction of Cold Rolled Steel Sheet Mill

宝钢股份冷轧薄板厂是宝钢股份专业生产薄规格冷轧产品及镀锌产品的生产单元。其前身上海益昌薄板有限公司成立于1989年，1998年上海宝钢集团公司增资控股益昌薄板，更名为上海宝钢益昌薄板有限公司。2004年4月1日，宝钢股份全资收购宝钢益昌，益昌整体进入宝钢股份产销序列，成为宝钢股份的冷轧生产单元之一——冷轧薄板厂，定位于专业生产薄规格精密冷轧板卷和镀锌板卷。

2000年以来，冷轧薄板厂的主轧机进行了大规模的设备改造，同时新建了高电流密度电解清洗机组、连续退火机组、镀锌机组以及国内第一条二次冷轧机组，并对罩式退火机组能力建设进行了扩容，使冷轧薄板厂的主体生产设备达到了世界先进水平，设计成品规模为100万吨/年。其产品包括冷薄板45万吨/年，电镀锡板35万吨/年，电镀锌板20万吨/年。
Cold Rolled Steel Sheet Mill of Baosteel is a production unit specialized in producing thin gauge cold rolled steel sheet as well as tin plate. Previously it was named as Shanghai Yichang Steel Strip Company Ltd. which was founded in 1989. In 1998 Shanghai Baosteel held a majority of share of Yichang through increasing investment and then changed its name into Shanghai Baosteel Yichang Steel Strip Company Ltd. On Apr. 1, 2004 Baosteel wholly owned Shanghai Baosteel Yichang Steel Strip Company via buying all the other registered capital of it. From that time whole Yichang has entered the production and sales system of Baosteel and become one of the cold rolled production unit of Baosteel, Cold Rolled Steel Sheet Mill, which is specialized in producing thin gauge precise cold rolled steel sheet as well as tin plate.

From 2000, the old cold rolling mill had been revamped drastically. Meanwhile new electrolyze degreasing line with high current density, continuous annealing line, new tinplate line, TFS line, recoiler and double reduce cold rolling mill which is the first production line in China were built up and also some new batch annealing furnaces were founded and put into production. In that case, the general production equipments of Cold Rolled Steel Sheet Mill are now of world advanced level and the design annual production capacity is one million. The products manufactured by this mill include cold rolled steel sheet in coil(450,000t/a), tinplate(350,000t/a), and tin free steel(200,000t/a), etc.
Production flow of Cold Rolled Steel Sheet
Cold Rolled Steel Sheet

- Continuous casting
- Batch annealing furnace
- Continuous annealing line
- Lot rolling
- Pickling
- 1220 five-stand tandem mill
- 1220 cold rolling
冷轧薄板产品
主要生产机组简介

**酸洗机组**

1990年从奥地利鲁士纳公司引进的浅槽式“推拉酸洗机组”，最大运行速度为每分钟180M，年酸洗能力为55.8万吨，并配有酸再生装置，酸回收率99%以上。

**冷轧机组**

2000年引进日本三菱技术进行了全面技术改造，改造后的机组由五机架四辊轧机组成，配有6台激光测速仪，五台X射线测厚仪。轧制能力提高到90万吨/年，轧制速度提高到1800M/min。

**脱脂机组**

2002年引进国内第一条大型高速自动化电解清洗机组，由日本川崎制铁提供设计，美国ROCKWELL公司负责电气设计制造，机组最高速度900米/分，是目前世界上最先进的电解清洗机组，设计年产量55万吨。
**Pickling line**

The push and pull pickling line with shallow tank was imported from Austrian Ruthner company in 1990. Its’ max. running speed is 180m/min and the annual capacity is 558,000mt. It is equipped with acid regeneration system and the acid recycle ratio exceeds 99%.

**Cold Rolling Mill**

The rolling mill was general revamped in 2000 by means of importing the technology of Mitsubishi Heavily Industry and Mitsubishi Electric. Now the continuous rolling mill is composed of 5 stands with four high, equipped with 6 sets of laser speed detector and 5 sets of x-rays thickness gauge. The annual rolling capacity is 900,000mt. The max. rolling speed can reach 1800m/min.

**Degreasing line**

It was built in 2002 and is the first big automatic electrolyte cleaning line with high speed in China. The technology of this line is supplied by Japanese Kawasaki Steel Corporation. America ROCKWELL company is responsible for the electric design and manufacture. The max. speed of the line is 900m/min. It is the global most advanced electrolyte cleaning line. The design annual production capacity is 550,000mt.
Cold Rolled Steel Sheet Products

Brief Introduction of Main Equipment of Cold Rolled Steel Sheet Products

Retardation Section

There are 46 cross-flow all-membrane-type quench furnaces, including 38 EBNER company cross-flow furnaces and 8 LOI company cross-flow furnaces, with an annual production capacity of 460,000 tons. All-membrane-type quench furnaces adopt the strong cross-flow bright quenching process with an ammonia purity of 99.999%.

Aligning Section

Established in 1990, this project brings in a double header aligning machine from America TIPPINS Company, with a maximum speed of 1500 m/min and an annual production capacity of 500,000 tons. Current modification plans are under implementation.

Secondary Cold Rolling Section

Established in 2004, this project brings in a double header secondary rolling machine from Japan TOSO Company, with a maximum speed of 1500 m/min, a secondary rolling speed of 1200 m/min, an annual production capacity of 250,000 tons, and secondary rolling products with the thinnest thickness of 0.08 mm.

Shearing Section

Established in 1990, this project brings in a maximum speed of 150 m/min, with an annual production capacity of 100,000 tons.
Annealing Furnace

There are 46 sets of full hydrogen forced convection batch annealing furnace (including 38 sets from Austria EBNER and 8 sets from Germany LOI). The design annual capacity is 460,000mt. The full hydrogen batch annealing furnace adopts force convection bright annealing process. The purity of adopted hydrogen is 99.999%.

Temper mill (now being rebuilt)

The two stands skin pass mill was imported from America TIPPINS company in 1990. The max. running speed is 1500m/min. The design annual capacity is 500,000mt.

Double reduce cold rolling mill

It was imported from Japan Mitsubishi-Hitch in 2004 and is the first double reduce cold rolling mill, which can also been used as the temper mill, in China. It is an UCM rolling mill having two stands with six high. The max. speed is 1500m/min when running as the skin pass mode and 1200m/min when running as the double reduce mode. The design annual capacity is 250,000mt. The min. thickness of the product for double reduce is 0.08mm.

Cut to length line

It was imported from America DALTA company in 1990. The max. speed is 150m/min. The design annual capacity is 100,000mt.
冷轧薄板产品
主要生产机组简介

Brief introduction of main equipment of Cold Rolled Steel Sheet Products

重卷机组

2006年从德国德马格－西马克公司引进，具有EPC，CPC以及刀具间隙自动调节功能，具有延伸率为5%的拉矫功能，机组最大线速度为400米/分，出口最大卷重为15吨，设计年产量25万吨。

纵剪机组

1990年从美国DALTA公司引进，具有剪边功能，机组最大线速度为300米/分，设计年产量15万吨。

连续退火机组

2008年从法国DMS公司引进，其中炉子段设备由法国STEIN公司提供，清洗段设备由德国UVK公司提供，焊机设备由日本TMEIC公司提供，机组电气设备从瑞士ABB公司引进，炉子段最高速度800mpm，机组年生产能力416500吨。
Recoiler

It was imported from Germany Demag-SMS company in 2006. It has EPC, CPC and knife gap automatic adjustment function. Its tension leveler equipment can make the elongation of steel strip reach 5%. The max. speed of the line is 400m/min and max. coil weight at the exit section is 15mt. The design annual capacity is 250,000mt.

Slitting line

It was imported from America DALTA company in 1990. It can slit the edge of the coil. The max. speed is 300m/min. The design annual capacity is 150,000mt.

Continuous Annealing Line

It was imported from DMS company of France in 2008, among which the furnace, the rinsing unit, the welding machine, and the electric system were supplied respectively by STEIN company of France, UVK company of German, TMEIC company of Japan, and ABB company of Swiss. The max running speed of the furnace is 800rpm and the design annual capacity of the line is 416,500mt.
宝钢股份冷轧薄板厂生产的冷轧板卷产品以宝钢股份自产热轧卷为原料，运用了国际冷轧钢带生产的各种新技术、新工艺，先后经过酸洗、连续轧制、脱脂、退火、平整、高精度纵剪、横剪剪切等工序，保证了冷轧板卷的产品质量。

目前宝钢股份冷轧薄板厂生产的冷轧板卷的产品实物质量达到了进口同类产品的质量水平，产品广泛应用于家电、精密焊接、药芯焊丝、自行车、电池钢壳、汽车配件、日用五金、搪瓷等行业。随着冷轧薄板厂二次冷轧机组的投产，二次冷轧薄板产品也已逐步投放市场并在彩电内磁屏蔽、彩电屏幕等高端产品得到应用。

秉承宝钢股份先进的用户服务理念，冷轧薄板产品始终以用户需求为导引，依托宝钢股份先进的管理理念以及一贯制生产质量管理体系和装备优势，为用户提供高质量的冷轧板卷。
HRC from Baosteel itself is the raw material of Baosteel Cold Rolled Steel Sheet Mill and after pickling, continuous rolling, degreasing, annealing, skin pass, slitting and cut to length line etc. It becomes the finished products which the customer required. Along with it many kinds of new technology and new process of global cold rolling production have been applied. Therefore the quality of the goods could be guaranteed. Nowadays the actual quality of CRC produced by Baosteel Cold Rolled Steel Sheet Mill has the same quality as that of the imported congeneric goods. It has been widely used in home appliance, precise welding tube, flux cored welding wire, bicycle, battery shell, automobile fitting, hardware and enameling industry etc. Along with the double reduce cold rolling mill being put into production, the double reduce products has entered the market step by step and been used for some high-end products for example colour TV set inner magnetic shield and kinescope shadow mask etc. Upholding the advanced user service philosophy of Baosteel, taking the orientation according to the customer demand, relying on the advanced management philosophy as well as consistent production quality management system and equipment predominance of Baosteel, the high quality CRC are supplied to the customer.
A.

Steel used for home appliance as well as other general uses products

The cold rolled steel sheet of Baosteel is mainly used for refrigerator, washing machine, freezer, air conditioner, micro-wave oven, water heater, soot-suck machine, electric rice cooker, electric roaster oven etc. In the other application industries, it is mainly used for enameling, office furniture, burglarproof door, electronic element, fastener battery, hardware, automotive fitting etc.
<table>
<thead>
<tr>
<th>材料用途 application</th>
<th>标准号 Standard</th>
<th>牌号 Grade</th>
<th>产品用途 Product application</th>
</tr>
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<tbody>
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<td>JISG 3141 402-2009</td>
<td>SPCC</td>
<td>冰箱侧板，洗衣机，冰箱外板，微波炉外壳，空调外壳，热水器，电饭煲，电烤箱，油烟机，燃器具外壳，日用搪瓷，日用五金，办公家具，防盗门，电子元件器件，纽扣电池，汽车配件等</td>
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<tr>
<td></td>
<td>Q/BQB 403-2009</td>
<td>SPCD</td>
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<td>EN10 130 403-2009</td>
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<td>DC01</td>
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</tr>
<tr>
<td></td>
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<td>DC03</td>
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<td>DC04</td>
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<tr>
<td>Home appliance and general application</td>
<td>ASTM A1008</td>
<td>CS TYPE A/B/C</td>
<td>Refrigerator side plate, Washing machine, Freezer plate, Micro wave oven, Air conditioner Water heater, Electric rice cooker, Electric roast oven, Soot-suck machine Gas cooking utensils Enameling, hardware, Office furniture Burglarproof door, Electronic element, fastener battery, automotive fitting, etc.</td>
</tr>
<tr>
<td></td>
<td>SAEJ 403</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1006</td>
<td>1008</td>
<td>1010</td>
</tr>
<tr>
<td>可供尺寸范围及重量 Available size as well as unit weight</td>
<td>钢板 Steel sheet</td>
<td>钢卷 Steel coil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>公称厚度 Nominal thickness (mm)</td>
<td>公称宽度 Nominal width (mm)</td>
<td>长度 Length (mm)</td>
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<tr>
<td></td>
<td>0.35-0.8</td>
<td>700-1001</td>
<td>2000</td>
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<td>600-900</td>
<td>700-1001</td>
<td>2000</td>
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<td>800-1200</td>
<td>700-1001</td>
<td>2000</td>
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<td>700-1001</td>
<td>2000</td>
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</table>
B.

精密焊管用钢

Steel sheet used for Precision welding tube

宝钢股份冷轧薄板厂生产精密焊管用钢已有多年的历史，目前国内主要的精密焊管用户都已经批量使用宝钢股份冷轧薄板厂生产的精密焊管用钢。其生产的单层焊管用钢（牌号为BHG1）和双层卷焊管用钢（牌号为BHG2）广泛用于制冷用冷凝器管、蒸发器管以及各种电加热管和汽车用油管。同时宝钢股份冷轧薄板厂生产的精密焊管用钢已开始批量出口欧、美市场。

Cold Rolled Steel Sheet Mill of Baosteel has produced the steel sheet used for precision welding tube for years. Now in China the main welding tube manufacturers have used our product in batches. The steel used for single wall welding tube (steel grade:BHG1) and double wall welding tube (steel grade: BHG2) are widely used in producing condensator used for refrigeration, evaporator as well as electric heating tube and automobile oil tube. At the same time this product has been entered the Europe, America market etc in batches.

<table>
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<tr>
<th>标准号</th>
<th>精密焊管用钢</th>
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<th>BXYZ2005-910</th>
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<tr>
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<td>BHG1</td>
<td>0.50-0.70</td>
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<td>Application</td>
<td>Condensator Evaporator Electric heater</td>
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<table>
<thead>
<tr>
<th>标准号</th>
<th>精密焊管用钢</th>
<th>BHG2</th>
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<tr>
<td>Grade</td>
<td>0.25-0.50</td>
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<tr>
<td>Application</td>
<td>Automobile oil tube Condensator Evaporator</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>标准及牌号 Standard / grade</th>
<th>宝钢企业标准 Baosteel standard</th>
<th>可供尺寸范围及重量 Available size as well as unit weight</th>
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<tbody>
<tr>
<td>标准号 Standard</td>
<td>钢卷 Steel coil</td>
<td>公称厚度 Nominal thickness (mm)</td>
</tr>
<tr>
<td>牌号 Grade</td>
<td></td>
<td>公称宽度 Nominal width (mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>钢卷内径 Coil ID (mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>卷重 Coi weight (T)</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>标准号</th>
<th>Nominal thickness (mm)</th>
<th>Nominal width (mm)</th>
<th>Coil ID (mm)</th>
<th>Coi weight (T)</th>
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<tr>
<td>BHG1</td>
<td>0.50-0.70</td>
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</tr>
<tr>
<td></td>
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<td></td>
<td>9-15</td>
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</tbody>
</table>
药芯焊丝用钢
Steel used for flux cored welding wire

宝钢股份冷轧薄板厂自2003年开始开发生产牌号为SYHS的药芯焊丝专用冷轧钢卷，供国内主要的药芯焊丝厂家生产各种规格及牌号的药芯焊丝，并于2006年开始批量对外出口。药芯焊丝用钢的化学成分、厚度精度、表面质量及力学性能等质量指标满足了用户的使用要求。

We have begun to develop steel sheet used for flux cored welding wire, grade: SYHS, from 2003 for the main flux cored welding wire manufacturer in China to produce all kinds gauges and grades of flux cored welding wire. From 2006 this product has been exported to overseas market in batches. The composition, thickness accuracy surface quality as well as mechanical property of this product can meet the demands of the customer.

<table>
<thead>
<tr>
<th>材料用途 Application</th>
<th>宝钢企业标准 Baosteel standard</th>
<th>可供尺寸范围及重量 Available size as well as unit weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>标准及牌号 Standard / grade</td>
<td>标准号 Standard</td>
<td>公称厚度 Nominal thickness (mm)</td>
</tr>
<tr>
<td></td>
<td>牌号 Grade</td>
<td>公称宽度 Nominal width (mm)</td>
</tr>
<tr>
<td></td>
<td>产品用途 Product application</td>
<td>钢卷 Steel coil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>钢卷内径 Coil ID (mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>卷重 Coil weight (T)</td>
</tr>
<tr>
<td>药芯焊丝用钢 Steel sheet used for flux cored welding wire</td>
<td>BZJ465-2008</td>
<td>0.30-0.90</td>
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<tr>
<td></td>
<td>BXYL2005-902</td>
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<tr>
<td></td>
<td>BHS1</td>
<td>508</td>
</tr>
<tr>
<td></td>
<td>BHS2</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>BHS3 (SYHS)</td>
<td>6-9</td>
</tr>
<tr>
<td></td>
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<td>9-15</td>
</tr>
</tbody>
</table>
D.

电池用钢
Steel used for battery shell

电池用钢股份冷轧薄板厂生产的电池用钢按表面结构状态分为
毛面电池用钢和光面电池用钢。毛面电池用钢主要用于冲制可
充电池钢壳。光面电池用钢主要用于冲制碱性电池钢壳。目前
电池用钢股份冷轧薄板厂生产的电池钢壳专用冷轧钢带已经开始批
量在国内的主要用户使用。

The steel sheet used for battery shell has two kinds according
to the surface condition. One is bright finish and another is dull
finish. The steel sheet with dull finish is mainly used for producing
rechargeable battery shell and it with bright finish is mainly used
for producing alkaline battery shell. At the present the steel sheet
used for battery shell has been used in main customers in China in batches.
### E.

**Steel used for inner magnetic shield and colour kinescope shadow mask**

磁屏蔽钢主要用于生产彩色显像管（CPT）和彩色显示管（CDT）的内磁屏蔽件，磁屏蔽钢按性能分为硬态钢带（BCB-2）和软态钢带（BCB-1）。荫罩带钢主要用于生产彩色显像管（CPT）和彩色显示管（CDT）的荫罩网板。

The steel sheet used for magnetic shield are mainly used to producing the inner magnetic part of CPT & CDT. According to the property the steel used for magnetic shield can be classified to hard steel (BCB-2) and soft steel (BCB-1). The steel sheet used for kinescope shadow mask are mainly used to producing shadow mask halftone of CPT & CDT.

<table>
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<tr>
<th>密度及牌号</th>
<th>标准号</th>
<th>磁屏蔽钢</th>
<th>钢带厚度 (mm)</th>
<th>规格宽度 (mm)</th>
<th>钢带内径 (mm)</th>
<th>卷重 (T)</th>
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<tbody>
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<td>Standard</td>
<td>Grade</td>
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<td>BCB-2</td>
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<tr>
<td>磁屏蔽件</td>
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</table>

<table>
<thead>
<tr>
<th>材料用途</th>
<th>应用</th>
<th>新产品</th>
<th>冲制各种内磁屏蔽件</th>
<th>数量范围及重量</th>
<th>产品用途</th>
<th>产品应用</th>
<th>可供尺寸范围及重量</th>
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<th>数量范围及重量</th>
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## Packaging

**Package**

1. Wood bracket  
2. Bottom plate  
3. Steel sheet  
4. Top cover plate  
5. Banding strip and lock  
6. Corner guard

---

**Shipping Mark**

**标志 Shipping mark**

The shipping Mark shall consist of: Trade mark, Seller’s name, Product name, Applicable standards, Specifications, Package No., Contract No., Heat No., Weight of coating film, Color, Production date, Weighting method, Net weight, Gross weight, Consignee and Protection symbols, etc.

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**Quality Certificate**

**质量证明书 Quality Certificate**

Each shipment of delivered steel sheets or steel coils shall be attached with the Quality Certificate. The Quality Certificate shall cover: trade mark, seller’s name, product name, applicable standards, product specifications, coil No. & package No., contract No., heat No., color, weight, buyer, quantity, test results as per standards, delivery time, quality certificate issuance date, signature by chief of the quality control dept., etc.

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**Cold Rolled Steel Sheet**

**冷轧产品包装方式**

1. Wood bracket  
2. Bottom plate  
3. Steel sheet  
4. Top cover plate  
5. Banding strip and lock  
6. Corner guard  
7. Rust-proof paper
1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Steel package box
5. Banding strip and lock
6. Rust-proof paper & plastic membrane

1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Top cover plate
5. Horizontal banding strip
6. Vertical banding strip
7. Corner guard
8. Lock
1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Rust-proof paper
5. Plastic membrane

6. Side protective plate
7. Top cover plate
8. Horizontal banding strip
9. Vertical banding strip
10. Lock

1-托架
2-下盖板
3-钢板
4-防锈纸
5-塑料薄膜

6-侧护板
7-上盖板
8-横向捆带
9-纵向捆带
10-锁扣

1-托架
2-下盖板
3-钢板
4-防锈纸
5-塑料薄膜

6-铁盒盖
7-横向捆带
8-纵向捆带
9-锁扣

1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Rust-proof paper
5. Plastic membrane

6. Side protective plate
7. Top cover plate
8. Horizontal banding strip
9. Vertical banding strip
10. Lock

1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Rust-proof paper
5. Plastic membrane

6. Steel package box
7. Horizontal banding strip
8. Vertical banding strip
9. Lock
<p>| | | | | |</p>
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<td>Top cover plate</td>
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<td>13.</td>
<td>Vertical banding strip</td>
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1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Top cover plate
5. Bottom corrugated paper
6. Rust-proof paper
7. Top corrugated paper
8. Side corner guard
9. Circumferential banding strip (inner)
10. Guard plate
11. Steel package box
12. Circumferential banding strip (outer)
13. Horizontal banding strip (outer)
14. Vertical banding strip (outer)
1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Top cover plate
5. Bottom corrugate paper
6. Rust-proof paper
7. Top corrugated paper
8. Side corner guard
9. Top corner guard
10. Bottom corner guard
11. Circumferential banding strip (inner)
12. Horizontal banding strip (inner)
13. Vertical banding strip (inner)
14. Guard plate
15. Steel package box
16. Circumferential banding strip (outer)
17. Horizontal banding strip (outer)
18. Vertical banding strip (outer)
1. Wood bracket
2. Bottom cover plate
3. Steel sheet
4. Top cover plate
5. Bottom corrugate paper
6. Rust-proof paper
7. Top corrugated paper
8. End corrugated paper
9. Side corner guard
10. Top corner guard
11. Bottom corner guard
12. Circumferential banding strip (inner)
13. Horizontal banding strip (inner)
14. Vertical banding strip (inner)
15. Guard plate
16. Steel package box
17. Circumferential banding strip (outer)
18. Horizontal banding strip (outer)
19. Vertical banding strip (outer)
1. Steel coil
2. External peripheral rust-proof paper
3. Inner core rust-proof paper
4. Iron inner corner guard
5. External peripheral wrapping plate
6. Paper external corner guard
7. Circumferential banding strip
8. Radial banding strip
9. Shim for lock
10. Lock
1. Steel coil
2. Circumferential rust-proof paper
3. Inner core rust-proof paper
4. Paper inner corner guard
5. Paper external corner guard
6. Iron round cover
7. Iron inner corner guard
8. Iron external corner guard
9. External peripheral wrapping plate
10. Inner peripheral guard plate
11. Circumferential banding strip
12. Radial banding strip
13. Shim for lock
14. Lock
1. Steel coil
2. Circumferential rust-proof paper
3. Inner core rust-proof paper
4. Paper inner corner guard
5. Paper external corner guard
6. Plastic sleeve
7. External peripheral corrugated paper
8. Round corrugated paper guard
9. External peripheral wrapping plate
10. Inner peripheral guard plate
11. Iron round cover
12. Iron external corner guard
13. Iron inner corner guard
14. Circumferential banding strip
15. Radial banding strip
16. Shim for lock
17. Lock
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<td>宝钢欧洲贸易有限公司</td>
<td>BAOSTEEL TRADING EUROPE GMBH</td>
<td>TEL: 0049-40-4199410</td>
<td>FAX: 0049-40-4198402</td>
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<td>BAOSTEEL MIDDLE EAST REPRESENTATIVE OFFICE</td>
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<td>宝钢美国贸易有限公司</td>
<td>BAOSTEEL AMERICA INC.</td>
<td>TEL: 001-201-3073355</td>
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<td>洛杉矶代表处</td>
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<td>FAX: 001-849-752234</td>
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<td>底特律代表处</td>
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<td>休斯顿代表处</td>
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<td>FAX: 001-281-4842655</td>
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<td>联合代表处</td>
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<td>FAX: 0055-21-25310298</td>
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<td>马来西亚代表处</td>
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<td>宝钢新加坡贸易有限公司</td>
<td>BAOSTEEL SINGAPORE PTE LTD.</td>
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<td>宝钢意大利钢材集散中心</td>
<td>BAOSTEEL ITALIA DISTRIBUTION CENTER SPA</td>
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