

About the Report

Prior to this report, Baoshan Iron & Steel Co., Ltd. (hereafter referred to as "Baosteel" or "Company") has issued its Environmental Report for 2003 and 2004 that conveyed the environmental information of the company to the public in a systematic and transparent manner, increased the understanding and contact between the society and the company and enhanced the motivation to improve environmental performance in the company.

In order to provide a more comprehensive description of the production and operation activities of Baosteel for a better understanding of the stakeholders, we rename this report as "Sustainability Report" with the expansion of economic and social content to promote continuous communication with the stakeholders. The report was compiled with reference to GRI *Sustainability Reporting Guidelines* (2002 version).

We took into consideration the interests and requirements of various readers as much as we can and made every effort to present a concise, clear and legible report during preparation of the report. We sincerely hope you could enjoy reading it and give us your comments and suggestions.

Content and Time Range

Language and Issue

The report mainly describes economic, environmental and social activities of Baosteel branches and subsidiaries in its major business of iron and steel industry (including: Baosteel Branch, Stainless Steel Branch, Special Steel Branch, Shanghai Meishan Iron & Steel Co., Ltd., Ningbo Baoxin Stainless Steel Co. Ltd., Baosteel-NSC/Arcelor Automotive Steel Sheets Co. Ltd., Yantai Lubao Steel Tube Ltd., Huangshi Coated Sheets Co. Ltd.), Chemical Branch, Research Institute and so on from January 1st to December 31st 2005, and makes a brief review of the relevant activities in the past as well, unless otherwise specified.

Financial data in the report is based on CNY unit. You may calculate according to the exchange rate of 1USD=8.0702CNY (1CNY=0.1239USD) (the exchange rate published by People's Bank of China on 2005 Dec. 31st) or 1EUR=9.5797CNY (1CNY=0.1044EUR). For reference, 1 ton standard coal=29.26GI.

The report

The report is published in both Chinese and English. The Chinese version will prevail in the event of any discrepancy between the two versions.

The report was issued in two forms - printout and PDF electronic file that can be downloaded from Baosteel's website (www.baosteel.com). Meanwhile, the latest information and news on the sustainable development of Baosteel can be browsed online or downloaded from the website, as well as the major publications of Baosteel (annual reports, financial reports, corporate memoir, environmental report 2003 and 2004, etc.).

Reminder

In May 2005, Baosteel Ltd. acquired part of the production units that formerly belonged to Baosteel Group Corporation. At present, Baosteel's branches and subsidiaries in major business of iron and steel industry include Baosteel Branch (the production plant of former Baosteel Co., Ltd at Fujin Road, Baoshan District), Stainless Steel Branch (part of the former Shanghai No.1 Iron & Steel Co., Ltd. of Baosteel Group), Special Steel Branch (part of the former Shanghai No.5 Iron & Steel Co., Ltd. of Baosteel Group), Shanghai Meishan Iron & Steel Co., Ltd. (part of the former Shanghai Meishan Iron and Steel Co., Ltd. of Baosteel Group), etc.

Environmental Protection and Resources Utilization Department was established newly during organization adjustment to manage environment and resource affairs of the company uniformly.

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Тах	47	In our opinion, the so-called "waste" is also a resource, a secondary resource generated in the production process
Appendix		and can be re-used under certain technical, economic and social
Honors	48	conditions. Therefore, we replace the generally called "waste" with
Record of Sustainable Development Activities	48	"secondary resource" and intend to
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Subsidiaries	50	difference of this single word reflects Baosteel's sustainability philosophy
Contact Us	50	to care about the nature and focus
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resources.

All that you see is the leisurely floating white clouds, rather than smoke and fog all over the sky; All that you hear is the sound of deer, rather than the riffles of noises.

Green Baosteel, beautiful homeland.



Green Baosteel, Harmonious Baosteel, Our Common Homeland



It's the common responsibility for all the enterprises worldwide to build a better home for the mankind, and so does Baosteel. Baosteel always gives top priority to the construction of an environment-friendly and harmonious enterprise. While realizing rapid development and creating significant economic benefits, Baosteel adheres to the sustainable development strategy by showing great concern over natural resources, ecological environment, labor's rights & interests and business ethics and committing to realize the harmonious development among the investors, customers, suppliers, employees and the society;

Baosteel observes the legal and trade rules strictly with the guidance of honesty and faithfulness. In December 2004, the international credit rating provider Standard & Poor's announced Baosteel's BBB+ credit rating and "stable" outlook;

Baosteel considers the care for employees' safety and health as one of the most important tasks. It conducts occupational health management in the overall process with an focus on preventing the occupational hazard from the source and process control to achieve the goal of "building a clean and healthy workplace to improve the occupational life quality of all the employees";



Baosteel pays attention to environmental protection and promotes clean production to build a "Green Baosteel". Since 1998, RMB1.5 billion yuan has been invested in the renovation of environmental protection facilities located in Wusong area of Shanghai and has made great contribution to the improvement of the regional environment;

Develop with the times. New connotation is constantly added to the concept of "Green Baosteel", from the development and certification of clean energy and clean production to such green products as electro-galvanized fingerprint-proof sheets and non-oriented electrical steel;

Repay the society warmly. Baosteel has established Baosteel Elegant Art Award and Baosteel Education Fund, donated to build hope primary school and invested more than RMB300 million yuan in social public welfare undertaking.

In Baosteel, "steel, environment and people" are developing in a harmonious and unified manner, complementing to each other.



In the economic globalization process, the enterprises are committed to improving their competitiveness and examine their economic, environmental and social performances. Sustainable development has become one of the strategies to improve competitiveness for enterprises and received more and more attention. It emphasizes social and ecological contribution which is measured on the basis of the "philosophy of sustainable development value" of the products and services. This philosophy extends the perspective of traditional financial statement, reflects the long-term development prospect of enterprise more completely and is critical to maintain and strengthen the continuous operation of enterprise.

As a member of "building a global economic alliance for sustainable development", Baosteel has always been attaching great importance to sustainable development, devoting to change the image of "high input, high consumption and high pollution" of iron and steel industry, relying upon process progress, scientific innovation and enhancing the environmental and resources awareness of the employees to realize the comprehensive utilization of resources, energy conservation and low consumption. To date, Baosteel has achieved obvious economic, environmental and social benefits.

Following the principle of "Reducing, reusing and recycling", Baosteel conducts centralized recovery, recycling utilization and safe treatment of the large amount of secondary resources formed during the iron and steel production through "sources control, production reduction; overall-process management, pollution prevention; recycling utilization, waste elimination; scientific research and development, increased benefit" and so on. In 2005, Baosteel reached the world advanced level in the following ratios: overall utilization ratio on solid secondary resources reached 98.11%, the total residue energy recovery reached 8.0% of the total energy consumption and the utilization rate of coke oven and blast furnace (BF) gas reached 99.3% and 98.2% respectively.

With the scientific development concept, Baosteel achieved its annual business goals, maintain and add the value of its state-owned assets through aggressive operation and innovation in 2005 although it experienced the substantial upheaval and intense competition in steel market. Baosteel completed the new shares issuance, acquisition and overall listing of its major iron and steel business as well as the stock ownership separation reform; deepened the integrated operation in its major business and realized more benefit of integration; achieved more reasonable product mix, more advanced equipment level, more obvious effect in energy conservation and consumption reduction and considerable elevation of competitiveness through newly-built projects and continuous elimination of backward production capacity.

In 2006, Baosteel will continue to carry out the people-oriented comprehensive and sustainable scientific development concept, implement Development Policy for the Iron and Steel Industry of China, develop premium and new steel products to upgrade the products with a focus on product structure optimization and increase the independent innovation ability and strengthen competitiveness quickly; complete and improve the company governance structure to exert the advantages of the integration of iron and steel $% \left\{ 1,2,...,n\right\}$ industry and the collaborative operation of relevant industries for optimized flow, lean operation, cost reduction and profit increase, as well as improvement of value creation and risk prevention through management innovation; grasp development opportunities to actively participate in the structural adjustment of domestic iron and steel industry, promote construction of planned projects and enhance the overall control and impact; mobilize all employees into environmental protection and cooperation with the international organizations to build Baosteel into a more environment-friendly iron and steel base with stronger core competitiveness. In the coming years, Baosteel will deepen integrated management efforts to enable the main production units to fully meet the standard of domestic advanced enterprise in clean production in 2008 and gradually build Baosteel into an iron and steel enterprise of new generation with three functions: steel products manufacture, energy transformation, treatment & absorption of bulk social secondary resources.







Company Vision

Core value Maximize the enterprise value — achieve the value balance and

common development between relevant stakeholders including shareholders, consumers, suppliers, employees and society

Mission Become an important steelmaker worldwide and commit to

providing value-added products and services

Strategic objective Become the most competitive iron and steel enterprise in the world



- Become the largest premium steel production base in China and the important one in the world with such strategic product groups as automotive sheet, electrical steel, stainless steel and high alloy steel to maintain the dominant position in Chinese steel sheet market:
- >> Possess a set of core technologies with independent intellectual property in iron and steel industry, technologies in energy, environment and resources utilization and proprietary technologies with great impact on iron and steel industry, become an enterprise with strong independent innovation ability and good innovative mechanism and atmosphere;
- >> Build a green iron and steel enterprise highly respected by the society with high-level harmony between human and environment in fulfilling our social responsibility and a demonstration base of circular economy for Chinese enterprises;

- >> Become an enterprise with continuous value creation ability with a management mode focusing on competitiveness and a customerdriven value management system;
- Become the innovative talent highland for steel making industry and further highlight the core culture of "Striving for first class with strict and demanding spirit by taking a learning and innovative road", and form the corporate culture with distinctive characteristics consistent with company development.

Three-year program in environmental protection and resources

China's "Eleventh Five-year" development period is full of strategic opportunities for Baosteel, which is crucial for Baosteel to implement circular economy and sustainable development and build an enterprise featuring environmental protection and resources conservation. By 2008, each main steel production unit of the company must reach the standard stipulated by Development Policy for the Iron and Steel Industry issued by the state and the standard of the first class enterprise of national clean production, pass the re-certification of "State Environment Friendly Enterprise" as a whole and achieve the goal of "building first class clean iron and steel enterprise in the world".

Energy conservation is the most effective environmental protection measure. In the next three years, we will steadily improve the company's overall energy management level and reach the 2010 goal set by the state-issued Development Policy for the Iron and Steel Industry three years in advance through establishing standardized energy management system, application of energy conservation technologies and promoting innovation of energy conservation technologies. At the same time, we will make full use of our facilities to supply energy and re-use wastes for the community in order to build up friendly symbiosis relationship with the community.

In Baosteel, SO, emission is mainly resulted from thermal power generation process and sintering process. The flue gas desulphurization unit for No. 2 generating unit has been put into operation and the sintering and flue gas desulphurization project will be launched in 2007. Comprehensive investigations and technological study will be conducted subject to such issues as Nox, permanent organic pollutants, volatile organic substances, dioxin and CO, in order to take control as early as possible.

Baosteel will develop specialized comprehensive resource utilization industry to realize the common development of comprehensive resource utilization industry and iron and steel business in accordance with the requirements of circular economy and the integration development strategy of Baosteel. Based on the efforts to improve the reutilization rate in the plant, Baosteel extends recycling utilization approaches outside the plant to raise resource utilization rate; develops comprehensive utilization products and utilize such secondary resources as slag, ash, mud, oil, acid and waste refractory materials as resources to form comprehensive utilization industries for building material, magnetic material, chemical raw material and metallurgical auxiliary materials.

Company Profile



Baosteel is the most modernized iron and steel complex with the most complete product range and the largest proportion of high-tech and high-value-added products in China. Baosteel has established its status as a world-class steelmaker with comprehensive advantages in reputation, talents, innovation, management and technology. Among the 23 "world-class steelmakers" in terms of integrated competitiveness released by Word Steel Dynamics in 2005, Baosteel was ranked No.3. Besides, it is also one of the most potential iron and steel enterprises in the future.

The head office of Baosteel is located in Shanghai, China. The first phase of Baosteel's construction project was initiated on December 23rd 1978 and completed and put into production on September 15th 1985; the second phase of projects went into operation in June 1991 and the third phase of projects was fully completed before the end of 2000. Established as a stock company officially on February 3rd 2000, the company was successfully listed in China on December 12th of the same year. By May 2005, Baosteel became the main steel production and operation body of Baosteel Group following its completion of new share issuance and acquisition.

Baosteel's major production bases include Baosteel Branch, Stainless Steel Branch, Special Steel Branch and Baosteel-NSC/Arcelor Automotive Steel Sheets Co., Ltd. in Baoshan area of Shanghai, Shanghai Meishan Iron & Steel Co., Ltd. in Nanjing of Jiangsu Province, Ningbo Baoxin Stainless Steel Co. Ltd. in Ningbo of Zhejiang Province, Yantai Lubao Co. Ltd. in Yantai of Shandong Province, Huangshi Coated Sheets Co. Ltd. in Huangshi of Hubei Province, and Baosteel Chemical Co. Ltd. in Baoshan of Shanghai that is not a production enterprise in iron and steel business, etc.

Currently, Baosteel's steel production capacity is about 20 million tons. The main products are sheets & tubes, auxiliary products are steel bars & wires, stainless steel products are still under development. Its high grade steel products such as automotive sheet, shipbuilding plate, household electric appliance sheets, pipeline steel and oil pipe take the leadership in domestic market share. And Baosteel is also a main supplier of high quality tool & die steel, bearing steel, spring steel, and tyre cord as well as steel for aviation and aerospace.

The company specializes in producing high-tech and high value-added steel products. Meanwhile it has become the main steel supplier to the industries of automobile, household appliances, oil exploration, oil and gas transmission, shipbuilding, pressure vessel and container materials in China, Baosteel also exports its products to over forty countries and regions including Japan, South Korea, the United States and European Union.

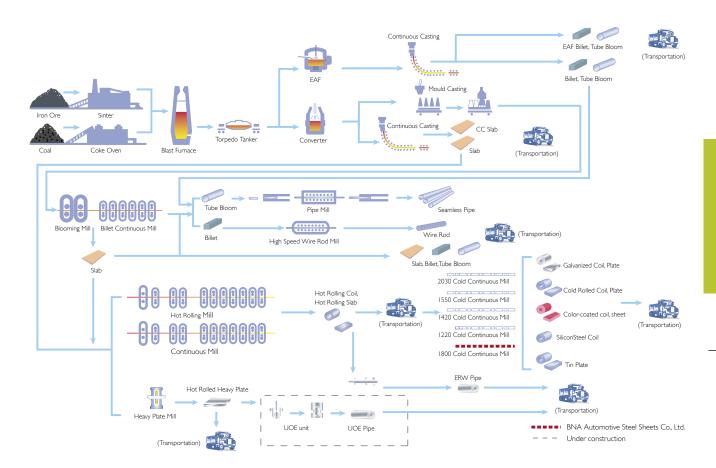
All the facilities the company possesses are based on the advanced technologies of contemporary steel smelting, cold and hot rolling processing, hydraulic sensing, real-time detection, electronic control, computer and information communications. They feature large-scale, continuity and automation and keep the most advanced technology in the world through constant technical modification and innovation.

The company adopts advanced quality management system in the world and its main products are recognized by the international authoritative institutions. They received attestation and reexamination by BSI (British Standards Institution) ISO9001. They were allowed to use the emblem of API (American Petroleum Institute). They obtained a certificate from JIS in Japan and passed the attestation of QS9000 system by GM, Ford and Chrysler, three most famous car makers in the world. Baosteel's products have also obtained recognition by seven classifications institutions of China, France, America, Britain, Germany, Norway and Italy.

The company is very powerful in research and development. As the core of the company's technical innovation, Baosteel Research Institute (Technology Center) mainly engages in the development of new technologies, new products, new processes and new equipment, which has accumulated inexhaustible driving force for the company's development. In the evaluation of enterprise technology center by the country, Baosteel Research Institute (Technology Center) ranked No. 1 in metallurgical industry for four years continuously and ranked No. 2 in 2005 nationwide.

The company attaches great importance to environmental protection and pursues sustainable development. As the first enterprise in China's metallurgical industry to pass the ISO14001 certification, Baosteel is hailed as one of the most beautiful steelmakers in the world with its afforested, clean and orderly plant area.



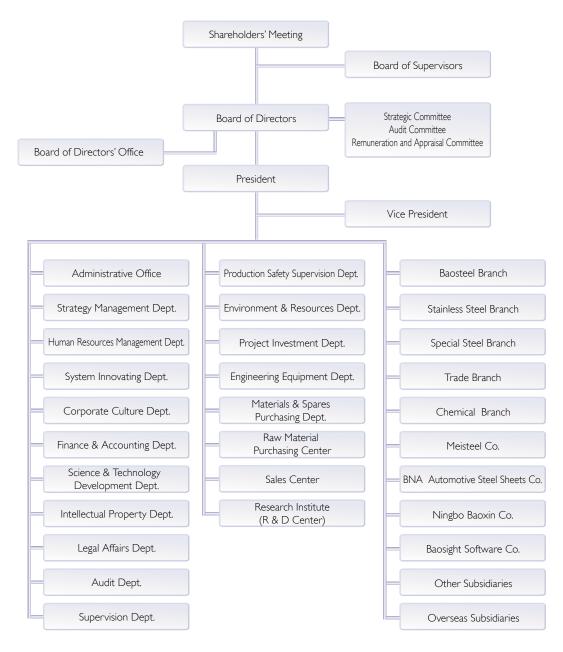








Organization Structure













Corporate Culture

Baosteel's corporate culture develops and enhances over the time.

"Striving for first class with strict and demanding spirit by taking a learning and innovative road" constitutes the core culture of Baosteel. It's the constant pursuit in the corporate culture construction to seek high-level harmony of enterprise development and realize the common development for both the enterprise and employees.

Baosteel's corporate culture has penetrated with its powerful influence into various aspects including production, operation, management and construction through the establishment of complete culture system, transformation of high standard honesty system for employees and enterprise, creation of vigorous learning organization, initiation of crossdepartmental collaborative teams and establishment of a world-class iron and steel enterprise image.

Baosteel's characteristic corporate culture provides strong cultural support to the transformation and development of the company.

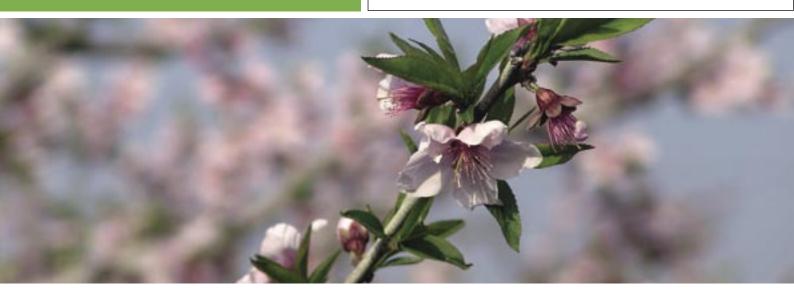
Investors' Involvement

Taking "creating value for investors" as its own duty, Baosteel continuously improves its governance structure, discloses information timely, accurately and completely, and establishes multi-channel and multidirection platforms to make sincere communication with investors in order to enable the investors to understand its operation and strategic planning and to discuss relevant issues about company development.

The Board Secretariat was set up to be responsible for investor relationship management; receive the visit and survey of domestic and overseas investors; make periodic convention of achievement releases and online demonstration for various investors to help they understand the operation situation of the company; actively participate in investors meeting and one-to-one communication to expand the company's reputation on both domestic and overseas capital market; set telephone hotline (0086-21-26647000) and shareholder mailbox (ir@baosteel.com); and create investor relationship website (http://www.baosteel.com/), on which information such as periodic financial statements are available to be downloaded.

Environment

- 1. Environment management system and organization
- 2. Practices to reduce environmental load
- 3. Development of environment friendly products
- 4. Research and innovation of environment protection and energy conservation technology
- 5. Jointly improve the environment of the earth
- 6. Environment performance



With full attention to sustainable development of both production and environment, Baosteel has steadily increased its environmental protection input, vigorously promoted clean production, adhered to the policy of green production and marketing and carried out environmental control according to its own enterprise standards which are more demanding than those set by the state. Baosteel passed ISO 14001 Environmental Management System Certification in January 1998; in 2002, the company was opened up to the society as Shanghai urban industrial sightseeing enterprise, formally becoming one of the industrial tourism demonstration spots in China. The company has also passed the British Standard Institute (BSI) certification for integrated management systems in June 2004 and the ISO 14001 reexamination in July 2004. In 2005, Baosteel was granted with the title of "China Environment-Friendly Enterprise", thus becoming the first winner of this honorable title in Shanghai as well as in China's metallurgical industry.

Regarding environmental protection as its duty and obligation to the society, Baosteel persists to the sustainable development strategy by launching comprehensive clean production, vigorously promoting technologies relating to environmental protection, energy saving and consumption reduction, taking efforts to develop green products and utilizing wastes as resources. In addition, Baosteel is devoted to building a first-class clean iron and steel enterprise in the world and creating a better living space for the employees, the enterprise and the society.

Environmental Management System and Organization

Environmental Objective

Build a first-class clean iron and steel enterprise in the world

Environmental Policy

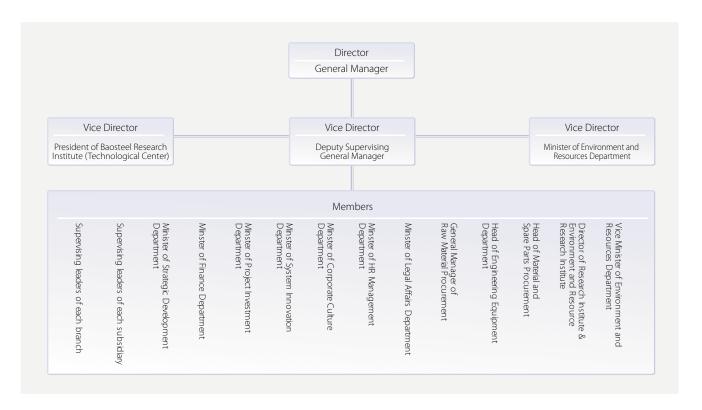
- Strictly abide by the environment-related laws, regulations and standards of the state, and perform the requirements of the international environmental conventions;
- 2. Continuously reduce the environmental pollution of the business activities and implement much stricter environmental standards for internal control;
- 3. Continuously push forward the reduction, recycle and reutilization of the solid secondary resources;
- 4. Pay attention to the comments and requirements of the stakeholders and actively improve the environmental quality of the community;
- 5. Actively participate in the international environmental exchange and cooperation to improve the ecological environment of the earth;
- 6. Actively promote the exchange and popularization of the advanced environmental technology in domestic iron and steel industry; and
- 7. Transform the production units with backward processes and serious environmental pollution to improve the overall environmental performance of the company.

Environmental Measures

- 1. Adopt advanced clean production processes and pollution control technologies in all new projects;
- 2. Guarantee the stable operation of the environmental protection facilities through strict management and maintenance:
- 3. Modify the existing environmental protection facilities with advanced environmental protection technology to improve their operation effects;
- 4. Implement comprehensive environmental management and adopt advanced management means to constantly improve the efficiency and effect of the environmental management;
- 5. Carry out the overall environmental propaganda and training throughout the company to enhance the environmental protection awareness of all staff;
- 6. Advance the research and development of environmental technology and promote the advanced environmental protection technologies; and
- 7. Evaluate the environmental performance of the company with rational methods and implement continuous improvement plan.



Environment and Resources Management Commission





The commission is the top decision-making institution on company environmental protection and resource utilization.

- * To make company environmental protection and resource utilization policies.
- To instruct and research company environmental protection and resource utilization strategic plan
- To coordinate relation between braches and subsidiaries and resource distribution
- To make decision on key projects of environmental protection and resource utilization

Implement Environmental Management in Accordance with ISO 14001 International Standard

Baosteel established and implemented the environmental management system in compliance with ISO 14001 international standard. At the beginning of 1998, Baosteel Branch was the first to obtain the certification of ISO 14001 environmental management system international standard in domestic metallurgical industry. In July 2005, Stainless Steel Branch passed the ISO 14001 certification. Other subsidiaries are making active preparations to obtain environment management system certification. In order to ensure the continuous improvement of environmental management system, Baosteel periodically organizes internal auditors to perform internal audit of the system and receives external audit by external audit units.



Practices to Reduce Environmental Load

Creating a "State Environment-Friendly Enterprise"

Baosteel lays stress on the coordinated development of production and environment with the consistent adherence to the scientific development view. As a result, the enterprise has witnessed the increasingly improved environmental protection performance while maintaining rapid development. Since the plant was set up, Baosteel has always integrated environmental protection into various aspects like process design, technical equipment and production management, etc. After over 2 decades of construction and development, Baosteel has become an extra-large most modernized integrated iron and steel complex in China with advanced process equipment, scientific management system, rational product mix, excellent product quality, firstclass production efficiency and the biggest production capacity. Baosteel was the first to obtain the certification of ISO 14001 international standard in metallurgical industry in China. Its various environmental protection indicators take the lead in domestic iron and steel industry all the time and some of them have reached the world advanced level. In 2005, Baosteel won the title of "State Environment- Friendly Enterprise."



In order to promote the clean production of the enterprises and the sustainable development of related industries, deepen the prevention and control of pollution and take the road of new-type industrialization, the State Administration of Environmental Protection (SAEP) has launched a campaign to create "State Environment-Friendly Enterprise" throughout the country since 2003 to set a group of model enterprises featuring outstanding economic benefit, rational resources utilization, clean and beautiful environment and coordinated development of economy and environment.

The environment-friendly features of Baosteel are as follows:

Firstly, the environmental protection technology and equipment boast high starting point and large investment. The company selected internationally advanced production processes, as well as technologies and equipment for environmental protection and energy conservation. Baosteel was the first to adopt technologies for environmental protection and energy conservation as dry coke quenching, power generation with BFG residual pressure, full desulphurization of coke oven gas, the dry-type dust removal of converter gas in China, and built the first all BFG and gas-steam combined cycle power generation unit in the world, which innovatively applies such clean production technologies as rotary-drum converter slag treatment, pulverization of BF slag into superfine power, etc.

Secondly, pay attention to the operation management of environmental protection facilities. The company considers environmental protection facilities as an important part of the production equipment. The operation management of environmental protection facilities adopts the same requirements as those for product quality and safe production guarantee. Perfect post responsibility system is established to link the operation condition and effect of the environmental protection facilities with the performance of the staff.

Thirdly, be self-driven to enhance the environmental protection awareness of all the staff. As the first enterprise to pass ISO 14001 Management System Certification in domestic metallurgical industry, the company has developed complete internal environmental management system and allocated responsibilities with internal control standards that are stricter than national and local environmental protection standards.

Fourthly, remarkable achievements have been made in the development of recycle economy. With full attention to the conservation and comprehensive utilization of resources, the company has taken many measures to recover secondary resources and energy.

Fifthly, always pay attention to the ecological environment construction in the plant area. With "high level and high input" in mind, Baosteel has conducted a lot of studies in the selection of tree and grass species as well as the layout, which not only beautifies the landscape of the plant area but also favors the improvement of local ecological environment.

Sixthly, pay attention to communication with the community and the publication of environmental information. In addition to the environmental report, the company issues the atmosphere quality daily report through Baosteel Daily and Baosteel Television Station.

"China Environment Friendly Enterprise" specialist acceptance group in Baosteel



Listening to report



Inspection on site

Adopt Advanced Process and Equipment to Improve Efficiency and Reduce Pollution in the Process

From the outset of the construction, Baosteel has attached great importance to the rational planning of production line layout, optimization of logistic paths and reduction of energy loss between working procedures; conserved energy consumption by improving continuous casting ratio, coal injection ratio, scrap steel proportion as well as hot charging and hot delivery level; exerted scale benefits with large-scale highly-efficient energy saving equipment such as 450 m² sintering machine, 6m coke oven, 4,000 m³ grade BF, 300t converter and large rolling mills. As a consequence, the economic index of production technology is improved, resources and energy consumption as well as pollutant emissions are reduced, and environmental load is alleviated.





Sintering:

Reduce solid fuel consumption to improve sintered product quality with low-silicon and high-iron sintering technology, thick substrate, low-temperature ignition technologies, etc.

Coking:

Baosteel was the first to employ the advanced CDQ technology as well as reutilization technology of tar slag and activated sludge in China, which can not only save energy and reduce environmental pollution, but also improve coke quality.

Iron smelting:

With the low-silicon iron smelting technology, highair-temperature and large coal injection technology and various long-life technologies, Baosteel's blast furnaces maintain the advanced level in China.

The average blast furnace coal inject ratio of Baosteel Branch 2000-2005 Unit: kg/ton 220 205 203 203 203 203 201 190 175 2000 2001 2002 2003 2004 2005

Steel making:

The slag-skimming furnace protection technology is adopted to extend the furnace life, reduce the refractory material consumption and oxygen consumption; the combined blowing technology is adopted to decrease the iron content in the slag and the lime consumption, increase the metal yield, decrease the oxygen consumption and reduce the refractory material consumption; the removal of sulphur, oxygen and silicon of the hot metal and the secondary refining of the molten steel have been widely adopted for the production of high-quality purified steel to reduce the consumption of iron and steel materials, auxiliary raw materials and oxygen; the world advanced non-defective cast slab technology is applied in continuous casting to improve the physical quality of the cast slab and prepare the cast slab for hot charging. The cast slab is hot charged into the steel rolling heating furnace.

Steel rolling:

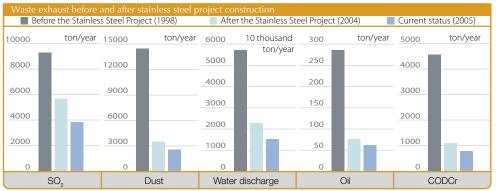
The hot charging process reduces the burning loss of the cast slab and increases the yield of the steel product; the pickling-rolling combined unit reduces the metal loss in the rolling process. The jet or turbulent pickling technology reduces the metal loss in the pickling process. The open-train mills have been thoroughly eliminated and replaced with international advanced continuous steel rolling production lines; the heat-stored burning technology has been applied to improve heat efficiency and reduce burning loss.

Public auxiliary facilities for energy:

Baosteel has employed large low energy consumption oxygen generators; installed the first CCPP generating units that completely burn BF gas in the world. At present, both Baosteel Branch and Meisteel have been equipped with CCPP. Part of the BF gas of the Stainless Steel Branch is used for steam production and the rest is supplied to Weisteel power plant. Thermo-electric plant of Meisteel makes full use of BF gas by adopting all BF gas-fired boiler and blended BF gas-fired boiler, which has resulted in almost no emission of BF gas and improved the atmospheric environment.



Besides, Baosteel has phased out the backward production units with high energy consumption and serious pollution and closed production processes and facilities with serious pollution and high energy consumption including the open hearth, lime kiln, cupola furnace, secondary steel-making, third steel-making of Stainless Steel Branch; completed the first and second phase of expansion projects of stainless steel hot-rolled sheet and coil with investment totaling approximately RMB15.6 billion. The two projects were completed in 2004 and 2005 respectively after over three years of construction. As a result, each environment indicator is getting better to different extent and the environment look of Stainless Steel Branch and its surrounding area has witnessed unprecedented, remarkable improvement.



In 2004, the smelted-iron steel making production line with high pollution and high energy consumption of Special Steel Branch was shut down, which reduces 2,772 tons of dust per year; in 2005, all of 23 gas generators were closed, which reduces 1,539 tons of SO_2 and 91 tons of soot dust and thoroughly eliminates the pollution to the area by the coal tar smell generated in the coal gasification process.

Close of the blast furnace plant





Production site before closing



Dismantling site



The Advanced Energy Management Reduces the Energy Consumption Fundamentally

Through constant practice and gradual exploration, Baosteel has formed the energy management mode suitable for its actual situation, i.e., "the whole process systematic energy management mode". The energy conservation and management is carried out in every link from energy conversion, energy medium transfer and distribution, end use of energy to utilization and recovery of residual energy, etc, which has delivered fairly good energy conservation effect.



Energy Center

Based on the accumulated experience of over 20 years of operation, Baosteel Energy Center has become an energy management system of the modern iron and steel enterprise following the successful transformation of its own technical force. The function of the energy center in energy production, supply and management is as following three aspects:

- (1) Considerable improvement of the labor productivity of the energy system by $8\sim10$ times.
- (2) Outstanding contribution to energy conservation and environment benefit. The Energy Center can perform centralized monitoring of all the energy media to reduce the diffusion of energy media and ensure the economic and rational operation of each system.
- (3) The graphical, visualized and quantification of operation and monitoring of energy system can make timely and correct treatment of the abnormity and accident, thus increasing its safety.

Through Energy Center, Baosteel carries out the unified balance and centralized adjustment, distribution and management of the energy media, as well as the real time coordination of the supply and demand of the energy media between the individual units. It has effectively reduced the diffusion loss of the energy media, in particular, the diffusion rate of the blast furnace gas and the discharge rate of the production wastewater, which has decreased the comprehensive energy consumption of Baosteel, increased the comprehensive energy utilization efficiency and alleviated the environmental pollution of the city.

Baosteel's key production units has established Energy Management Center (EMS) of different scales and created good conditions for comprehensive management of the company's energy, accomplishment of the efficient recovery and utilization of energy and reduction of waste and unorganized use of energy.





Recycling Utilization of Water

The main water saving measures of Baosteel include: recovery and utilization of waste water; implementation of a series of water saving technologies including the quality-based distribution of water resources, rational use and serial utilization; reduction of fresh water utilization and effective water resources conservation as possible as it can. For instance, Baosteel Branch mainly adopts the following technologies:

Serial utilization technology. On the basis of ensuring the balance of the water quantity in the whole water system and increasing the circulating rate of the individual systems through rational allotment and water quantity control, the recycling water system makes further serial utilization of the discharged waste water of each water system. That is to say, the discharged waste water from clean circulating water system is replenished to unclean circulating water system, then to coal gas washing system; and from coal gas washing system delivered to slag treatment system; finally, the waste water is absorbed by the furnace slag and evaporated. Thus, zero discharge of the whole water system is realized without any harm to the environment.

Waste water reuse technology. Developed according to the actual conditions, the Pinch technology has been used for the full calculation and rational arrangement of the existing waste water to propose the optimal technical plan for the reuse of waste water. As a consequence, the reuse rate of waste water has reached over 75%.

Intermediate water reuse technology. The domestic sewage previously designed by Baosteel Branch to discharge into the municipal sewage pipe network directly through the sewage pipe without any treatment. Since 1998, 26 domestic sewage treatment stations with the water treatment capacity of about 3.80 million tons per year have been built and completed. The treated intermediate water is delivered into the river surrounding the plant via a changed route. Since 2001, Baosteel has started the research on reuse of the intermediate water and succeeded in reusing it in clean circulating cooling water system to replace the industrial replenishing water, thus becoming the first enterprise to reuse the intermediate water in the industrial system among domestic iron and steel enterprises.





Recover and Utilize the Surplus Energy, Reduce the Primary Energy Consumption and Decrease the Discharge

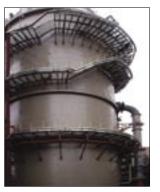
The surplus energy mentioned here refers to the energy obtained by recovering the surplus heat and pressure, etc generated in the production process and input into the system. The surplus energy recovered mainly includes electricity, steam and converter gas. The surplus heat resources mainly refer to the sensible heat of red coke, raw coke oven gas, sintered ore, furnace cinder and steel slag, fume of heating furnace and steel slab (ingot), etc. Baosteel's recovery level of the surplus energy resources has been improved year by year since it was put into production. In 2005, the total recovery amount of the surplus energy resources reached 1.23 million tons of standard coal and the recovery rate per ton steel was 59 kgce.

The main surplus energy and surplus heat recovery equipment and measures are: coke dry quenching technology (CDQ technology), surplus heat recovery from sinter fume, TRT power generation by BF waste heat, converter gas and steam recovery technology, steel pipe loop furnace waste heat recovery technology, cold rolling afterheat recovery technology, hot rolling evaporation cooling technology and so on.



Higher Environmental Protection Input and Perfect Environmental Protection Facilities Have Guaranteed the End Treatment

The investment in the environmental protection facilities for the first, second and third phase of Baosteel totals RMB4.34 billion, accounting for approximately 5% of the total project investment. In order to ensure the normal operation of environmental protection facilities and improve the operation efficiency constantly, Baosteel invests certain fund for the modification of environmental protection facilities every year. Key environment modification investment in 2004 and 2005 is RMB96.42 million and RMB166 million respectively. 316 items of world advanced environmental protection technologies and devices have been adopted in total, including 219 sets of dust removers, 64 sets of water treatment facilities, 26 sets of solid secondary resources disposal and utilization facilities and 7 sets of other environmental protection $facilities. \, In \, order \, to \, reduce \, SO, \, emission \, of \, the \, fossil \, power \, plant, \, Baosteel \, Branch \, introduced \, the \, fume \, desulphurization \, for \, the \,$ technology of the world advanced level into No.2 unit of its power plant.



2# line desulfurizing tower

In the light of Shanghai Municipal Three Year Action Plan on environmental protection and the comprehensive rectification of Wusong Industrial Zone, Baosteel has made a huge investment to manage environment, reduce pollutants emission and improve ecological environment.

Among which, the Stainless Steel Branch has completed more than 60 pollution treatment projects, large and small, with an investment of nearly RMB800 million and built waste water treatment facilities with the daily treatment capacity of 28,000 tons. Most of the 1.9 million tons of solid secondary resources have been put into comprehensive utilization, which is produced every year.

Dust treatment of pig-casting machine by Stainless Steel Branch





after treatment

Fugitive dust treatment in secondary slag pile yard by Stainless Steel Branch





before treatment after treatment

In order to continuously improve environmental quality, Stainless Steel Branch has completed 15 pollution treatment projects successively with an investment of RMB 370 million. The completed projects mainly include: 1) the sewage pipe network construction and sewage treatment stations with a daily sewage treatment capacity of up to 33,000 tons. 70% of the treated water is reused; 2) the dust removal modification for steel plants; 3) 141 industrial furnaces transformed to use clean natural gas as fuel. After modification, the environmental quality in this area has witnessed remarkable improvement.

The environmental indicator progress for Special Steel Branch

Project	Waste water (ton)		Waste gas (ton)			
Year	COD	Oil	Ammonia nitrogen	Dust	Flue gas	SO ₂
2002	1054	102	42	5304	373	2617
2005	627	79	20	1547	236	1768

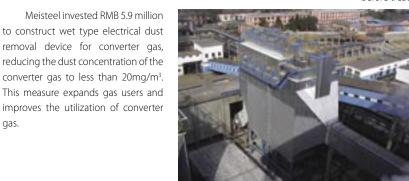
Non-organized emission treatment by No. 2 Workshop of Steel Plant





before treatment

after treatment







Advance the Comprehensive Utilization of Secondary Resources and Develop Recycle Economy

Baosteel takes the road to sustainable development by conserving energy, launching overall clean production and vigorously promoting recycle economy to create an environment-friendly ecotype steel enterprise that develops in harmony with the city. Following the new share issuance and acquisition in 2005, the company further improved its management system and forcibly complemented integration operation. As a result, uniform management was realized in environmental protection and resource utilization in each production unit, which brings Baosteel's recycle economy to a new level

In accordance with the requirements of clean production and recycle economy, Baosteel orients the disposal of solid secondary resource towards reduction, resource and harmlessness with the domestic and international advanced solid secondary resource treatment processes and facilities. In particular, Baosteel has achieved obvious effects in recent years in the recycling utilization of secondary resources by constantly promoting the development and application of new technologies and new processes and gradually improving the optimized resource allocation and rational division, and has preliminarily formed resource comprehensive utilization industry with a group of autonomously developed technologies. In addition, Baosteel has already been qualified for mass production in terms of management system, technology, talents, technological equipment and marketing, etc; in particular, it has possessed certain competitive advantages in the field of new building materials and magnetic materials.

In 2005, various industrial solid secondary resources produced by the company, such as BF slag, steel slag, iron-containing sludge and dust, coal ash, waste refractory material and waste and used oil, etc, amounted to 11.94 million tons. 11.72 million has been utilized and the utilization rate reached 98.1%. The secondary resources reused in production were 2.42 million tons, accounting for 20.6% of the solid secondary resources comprehensively utilized.

BF slag. The BF molten slag is the largest metallurgical slag resource. All the BF molten slag produced by Baosteel is used to produce ground granulated slag and as a raw material in making slag-Portland cement, which not only saves much limestone but also reduces CO_2 discharge. The ground granulated slag produced by Baosteel has been widely used in the construction of the state major projects, such as Shanghai Magnetic Levitation Project, Lu Pu Bridge, Shanghai Science and Technology Museum, Yangshan Deep Water Port, etc.

After many years of experimental research and market development, the BF dry slag has been widely used in municipal projects and production of new-type mineral wool products.

Steel slag. With many years of research and development, the steel slag of Baosteel has been reused for sintering steadily. The external utilization has been developed from the general engineering fill-back to the field of cement, roadbed, concrete project, treatment of soft foundation, etc. Great progress has been made in the research and development with higher technical-level of the steel slag powder compound mixing material, the steel slag dry powder mortar and the steel slag compound dephosphorization agent.

Baosteel has developed the rotating drum technique for steel slag treatment. Because of its good stability, the treated steel slag can be directly used to build roadbed, dam, etc.

Coal ash. The ground coal ash produced in the company is directly used as concrete admixture and part of it is used as roadbed material.

Iron-containing sludge and dust. Except that part of BF gas sludge and converter OG sludge with lower zinc content is recycled in the sintering procedure, most of the iron-containing sludge and dust is treated with simple processing or directly for export. The iron powder oxide produced in the steel rolling procedure is used to produce magnetic material, except that the desilicated sludge cake has been successfully used to produce iron oxide pigment.

Baosteel's treatment and utilization of industrial solid secondary resource has developed from the previous storage disposal and simple delivery outside to the present new technology treatment, production system recycling utilization and high value-added utilization, which effectively prevents secondary pollution, changes wastes into valuables and saves primary resources. Efforts have been made to form an ecological system with virtuous circle, generating obvious social, environmental and economic benefits.





Pay Attention to the Ecological Environment Construction in the Plant Area

Baosteel Branch has consistently paid high regard for the ecological environment construction in the plant area and its surrounding area with the guidance of new ecological garden theory in order to build a highly efficient, beautiful and civilized modern plant without pollution and wastes. A man-made plant community dominated by plant landscape has been built after many years of construction and modification, which has improved the recycling function and landscape quality of the ecological forestation in the plant area and its surrounding area. Since 1991, Baosteel has won the following honorable titles: national advanced unit in afforestation by National Afforestation Committee for many times; Shanghai "Garden Unit" by Shanghai Afforestation Committee and "Advanced Unit in Afforestation" by national metallurgy and afforestation industry.





In view of production process modification and the construction of new stainless steel cold rolling production line, Stainless Steel Branch has invested RMB60 million in the afforestation construction in the plant area and its surrounding area. Consequently, the afforestation look of the plant area has been remarkably improved.





In 2005, the Special Steel Branch invested RMB10.55 million in the comprehensive environmental treatment to carry out a new round of afforestation construction and stride towards the ecotype special steel elaborate product base. At present, it has possessed 797,000 square meters of green land. Meanwhile, RMB5.55 million has been invested to construct a landscape greening forest belt with an area of 66,000 square meters in two phases along the Line 3 on the west side of Tongji Road.



Effect Drawing of landscape greening forest belt of Special Steel Branch





In 2005, Meisteel invested about RMB3.9 million in 14 afforestation modification and maintenance projects including afforestation projects, maintenance and plantation, among which the newly developed afforestation area amounts to 13,200 square meters and the modified afforestation area amounts to 16,500 square meters.

Development of Environment-Friendly Products

Environmental benefits	Prevent global warming	Environmental risks management	Build a recycling society
Downstream industry	Energy saving, CO ₂ emission reduction	Environmental protection, chemical management	Recycling utilization, extended lifetime
Automobile industry	Light weight, high safety High strength sheet, wire and bar Simplify process of users Laser welding sheet	Environment-friendly materials Lead-free hot galvanized steel plate Lead-free free-cutting steel Chromium-free galvanized steel plate for automobile use Reduced noise and vibration Vibration-absorbing composite plate	Extend lifetime, reduce waste Hot galvanized high strength steel (DP steel) Electro-galvanized high strength steel (TRIP, DP steel)
Food and beverage	Reduce weight of beverage can Thin DI sheet		
Household appliances industry	Simplify process of users Color coated steel sheet for household appliances Self-adhesive coating electrical steel Self-lubrication film treated hot galvanized steel sheet Increase motor efficiency High-efficiency non-oriented electrical steel	Materials free of substance harmful to environment Lead-free hot galvanized steel sheet Chromium-free hot galvanized steel sheet for household appliances Chromium-free electro-galvanized steel sheet for household appliances Chromium-free hot galvanized steel sheet for household appliances Chromium-free preheated color-coated steel sheet for household appliance	Extend lifetime, reduce wastes Hot galvanized (aluminum-plated) series products Hot galvanized series products Electro-galvanized series products Color-coated series products
Electricity, energy	Increase power generation efficiency High-temperature and high-pressure boiler pipe Increase energy transportation efficiency High-strength and high-toughness pipeline steel		Increase power generation efficiency High-pressure boiler pipe High-strength steel pipe Extend lifetime Chemical tank steel Petroleum tank steel
Building, civil construction	Increase construction efficiency High-strength and high-toughness thick plate Thick steel plate for large line energy welding		Extend lifetime High-strength series enamel steel High-strength structure steel for building High tensile strength wire Self-cleaned color-coated steel sheet High-toughness and high-strength structure steel pipe High-strength fireproof and weatherproof steel Durable cooler-coated steel sheet
Others	Simplify process of users ▶ Non-hardened-and-te mpered		



Dedicated to Green Ecological Products that Reduce the Greenhouse Effect of the Earth

Taking the whole life cycle of iron and steel products from the production, use, discard and recycling utilization into consideration, Baosteel provides high-strength and light-weight products with increased efficiency and simplified process for users, and contributes to energy saving, CO₂ cutting-down and global greenhouse effect reduction throughout the life cycle of iron and steel products.

High-Strength Steel for Automobile

Automobile using high-strength steel sheet can reduce weight, save energy and remain safety. The use of high-strength steel for automobile is beneficial to save resources and fuels and reduce pollutants such as CO₂. Baosteel has formed the capacity to produce series of high-strength automobile steel sheets, such as the product series of high-strength IF steel, high-strength BH steel, DP steel, TRIP steel, etc.

High-Efficiency Non-Oriented Electrical Steel

As an electrical material with high magnetic induction and low iron loss, the high-efficiency electrical steel has solved the contradiction between iron loss and magnetic induction performance of the electrical steel through the adjustment and optimization of composition and process, thus catering to the need of the high-efficiency and energy-saving motor and the El transformer. The high-efficiency electrical steel developed by Baosteel has been used in refrigerator compressor, El core and medium-sized electrode, bringing about good effects.

High-Temperature and High-Pressure Boiler Pipe

With good high-temperature creep fracture strength, excellent fracture toughness, thermal corrosion resistance, machinability and weldability, the high-temperature boiler pipe produced by Baosteel can be used to manufacture supercritical boiler and super supercritical boiler. In this way, energy can be saved and environmental pollution can be alleviated.

High-Strength and High-Toughness Pipeline Steel

With excellent performance in intensity, toughness, weldability and corrosion resistance, Baosteel's high-strength and high-toughness pipeline steel can be used to manufacture high-pressure, large-diameter and long-distance pipelines in different geographic environments. It is favorable to increase the transport efficiency of the pipeline and reduce energy consumption, investment and operation cost of the pipeline as well.

High-Toughness and High-Strength Thick Plate

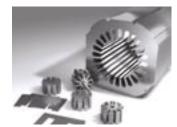
Featuring high strength, high precision, good low-temperature impact toughness and weldability, the excellent thick plate produced by Baosteel is widely used in such industries as shipbuilding, bridge, boiler and pressure vessel. This product can fulfill the purposes of improving construction and operation efficiency, decreasing manufacturing cost and lowering labor intensity.

Self-adhesive Coating Electrical Steel

With excellent self-adhesive performance, the self-adhesive coating electrical steel products developed by Baosteel boasts a promising prospect for market application as they can greatly simplify the bonding and solidifying procedure of the iron cores in various electromechanical products, shorten production cycle and reduce production cost. Due to the replacement of internationally universally used solvent-type coating for the water-based environment protection type coating, the production process is turned into environmental-protection type, which improves the production conditions and the effect on environment.

Thin-Type Tin Plate (DI Plate)

Baosteel is devoted to constantly improving the product quality of the tin plate, reducing the thickness and increasing the width of the products according to the development trend of the tinned products. Baosteel was the first to successfully develop the 0.23mm-thick tinned products and the 0.245mm-thick DI sheet. As packaging materials with good quality and high efficiency, their higher strength and smaller thickness enables users to save purchasing cost. Baosteel's tin plate is widely used in various fields of metal packaging industry, covering beverage can, food can, spray can, high-grade chemical can, different kinds of capsules and gift can, etc. Particularly, in the field of beverage can and food can that represent the production level of the tin plate products, Baosteel not only supplies DI sheet for deep punching and drawing and K sheet with high corrosion resistance for commercial use, but also possesses good brand image and a group of cooperative partners.





Chromium-Free Post-Treatment Galvanized Product

Based on the idea of "Making Green and Green Making", Baosteel produces galvanized surface-treated steel sheet with chromium-free treatment on the electro-galvanized or hot-galvanized (aluminum) plated steel sheet, that is, no harmful element is added purposely in the production process in accordance with the specifications of Restriction of Hazardous Substances directives(RoSH). Through several years of planning, research and development, Baosteel has developed a full series of steel products for household appliances that meets various demands to adapt to the changes of market demands, which adds more connotations to "Green Baosteel".

The passivated film is formed on the hot-galvanized surface through the reaction of zinc (or aluminumzinc) with the chromium-free passivation solution, which is composed of special film-forming organic substances and the additives to replace the passivated transfer film formed by the chromate treatment. By using different production process and treating agents, the time when the white spot is produced on the surface can be delayed to provide the products with the temporary rust resistance or the long-term rust resistance, etc, to satisfy the different requirements of different users. With good corrosion resistance ability for exposed use, excellent weldability and electric conductivity, the hot-galvanized and chromium-free passivated steel sheet is widely used for the inner plate of the household appliances such as air conditioner, refrigerator, washing machine and electrical control panel. In addition, the chromium-free passivated steel sheet of the organic type has a certain fingerprint-resistance property.

Chromium-Free Color-Coated Steel Sheet for Household **Appliances**

In compliance with new environmental-protection requirements for household appliance products of the European Union, Baosteel meets the users' requirements for product properties by developing the household appliance series color coated sheets and carrying out the chromium-free process production in aspects of pretreatment, prime and finishing coat, etc. The corrosion resistance of the products is better than that of their foreign counterparts. Now, the environmental-production color coated products of Baosteel have been widely used in domestic household appliances industry and the mass production of the environmental-protection household appliance products has been accomplished.

Vibration-Absorbing Composite Plate

The vibration-absorbing composite plate produced by Baosteel is a kind of functional material made of a three-layer composite structure of metal/high-molecular damping material/metal. It effectively combines the metallic material and the high-molecular material, rendering both the mechanical properties, machining and shaping characteristics of the metallic material and the damping characteristics of the high molecular. Thus, it is the ideal environmental-protection product to replace the metallic material in case of vibration and noise. For the replacement of the original cold-rolled sheet by the vibration-absorbing composite plate, it is necessary to change the original punching and coating process. It is unnecessary to change the original processes such as punching and coating when replacing the original cold rolled sheet for vibration-absorbing composite plate. The convenient replacement generates remarkable vibration absorption and noise reduction effect. In recent years, this kind of plate has been gradually developed and widely used in the automobile, household appliances, engineer machinery, building and communication industries, etc.













Dedicated to the Green Products that Extend Lifetime and Reduce Wastes for Recycling Utilization

High-Strength Series Enamel Steel

The high-strength series enamel steel developed by Baosteel is widely used in such industries as light industry, household appliances, metallurgy, chemical and building industries and can be used to make kitchen ware, toilet ware, inner bladder of hot-water shower, baking oven, building decoration panel, radiation plate and chemical reactor. In addition to its beautiful appearance, it also boasts the advantages of chemical corrosion resistance, heat resistance; wear resistance, easily-cleaned surface and long lifetime. As the enamel product is made by burning the glaze-sprayed steel sheet bottom billet at a temperature above 800°C, it has the following features: innocuity, no rust, no pollution, no radioactivity, stable physical and chemical properties, energy saving and environmental protection.

Self-Cleaned Building Color-Coated Sheet

When the existing ordinary polymer-type building color-coated sheet is used as the outer wall panel, a lot of air pollutants will be absorbed by the wall and the non-uniform veined flow mark will be formed on the surface after a period of weathering, which seriously affects the visual effect of the building color-coated sheet application and adds the users' burden to clean the colorpanel building.

Based on the state of the ordinary building color-coated sheet, Baosteel has designed and developed the self-cleaned building color-coated sheet. On one hand, through the redesign of the coating structure, the densification of the coating surface is increased to reduce the deposition and penetration of the air pollutants on the surface of the color-coated sheet. On the other hand, the introduction of a large amount of hydrophilic radicals into the surface of the color-coated sheet realizes the hydrophilic function of the color-coated sheet so that the water film can spread on the surface of the color-coated sheet more easily.

With the combination of the above two characteristics, the self-cleaned building color-coated sheet can keep the building clean and beautiful for a long time with the flushing of the natural rain water, which avoid the cost and trouble of manual washing and achieves self-cleaning effect.

Now, this product has already been used in the construction of the plant building of the welded pipe branch of the steel pipe plant in Baosteel Branch and introduced to the market gradually.



Research and Innovation of Environment Protection and Energy Saving Technology



CO, Emission Reduction

Baosteel actively participated in the project of "Basic Research on the Absorption of Carbon Dioxide by Converter Slag" launched by International Iron & Steel Association. At present, research is being made on the carbonation of steel slag, the effect of the steel slag on the ocean ecology and the facilitation of the slag of the production force of the ocean. The research findings will be of great significance for the reduction of carbon dioxide and the expansion of steel slag's application.

Life Cycle Appraisal (LCA) of Product

In June 2004, Baosteel launched the research on the life cycle appraisal (LCA) of the galvanized product to provide the decision-making basis for improvement of the life cycle environmental performance of the product. This research created the galvanized product life cycle list (LCI) model and developed the software for the first time in China. It not only quantitatively provided the environmental effect and the resources consumption for the production of 1 kg of Baosteel galvanized product and the relevant products, but also quantitatively analyzed the production link that has important environmental impact, analyzed the distribution of the environmental load in production system, identified the chance and direction for reducing its environmental load and environmental impact, calculated the environmental benefit brought to the steel product by different environmental protection projects, thus providing the decision making basis for pollutant emission control of Baosteel.

Reduction of Dioxin Emission

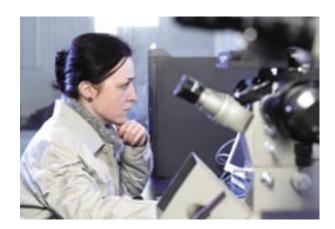
"Basic Research on the State of Baosteel Dioxin Pollution and Prevention Technology" working group carried out the industrial test of dioxin emission reduction in the production procedure of No.1 sintering machine of Baosteel Branch and the 100-ton electrical furnace of the Special Steel Branch. With active support to China's performance of Stockholm Convention, this project undertook the dioxin reduction demonstration project in Baosteel set by the Execution Office of the State Environmental Protect General Bureau for the Stockholm Convention. Moreover, this project carried out the research and preparation of the catalyst for dioxin decomposition. The research of the catalyst has obtained a patent. In addition, the quantum chemistry calculation of the basic thermodynamic nature of the dioxin was carried out to full scale, from which the complete and accurate dioxin thermodynamic data were obtained. The research papers have been published in the international journal and the international conference on dioxin.

IPR

Baosteel's patent application grows at an annual rate of 20%, with more than 80 patent technologies having won golden medals and silver medals at domestic and overseas exhibitions. In November 2005, the 7 patent new products and new technologies exhibited by Baosteel were awarded three golden medals, two silver medals and two brass medals at the "Ideas, Inventions and New Technologies Promotion Meeting" (IENA), the largest international innovation and invention exhibition.

As one of the first national technical innovation experimental enterprises, Baosteel was awarded "National Enterprise Technical Progress Prize". In 2004, Baosteel was awarded "Technical Innovation Achievement Prize" by the State Development and Reform Committee. In July 2005, Baosteel ranked second in the country and first in domestic metallurgical industry in the evaluation of the 332 state-level enterprise technical centers ascertained by the State Development and Reform Committee.

Jointly Improve the Environment of the Earth



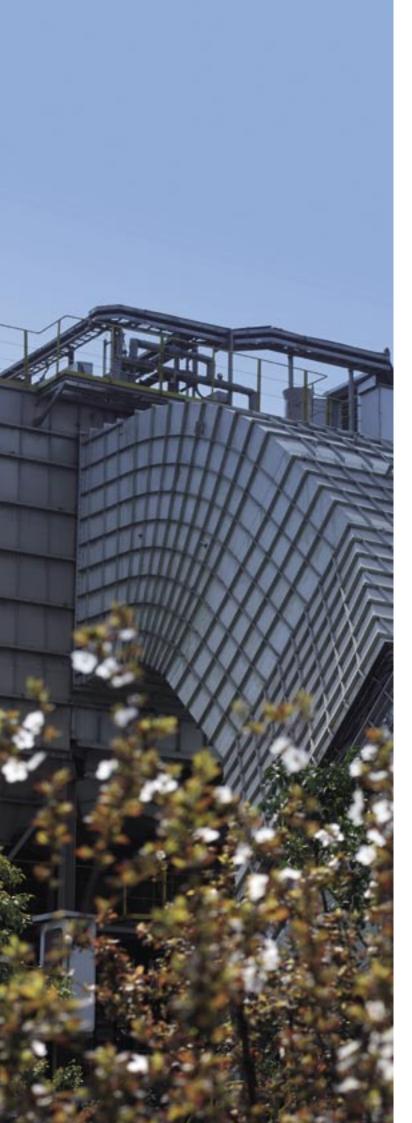
In order to enhance the cooperation with international famous universities, research institutes and counterparts as well as make full use of external resources, the company planned, organized and implemented more than 70 domestic and overseas technical exchange activities in 2005. In the same year, domestic and foreign experts invited reached 332 person in total and technical exchanges participated by Baosteel reached over 1420 person. Several foreign environmental protection experts were invited to conduct technical exchange and hold consulting lecture on environmental protection, including experts and scholars from Nippon Steel, Sumitomo Metal Industries Limited, Kobe Steel Co, Ltd. and New South Wales University of Australia. The company has also planned to carry out the scientific research in cooperation with the well-known universities of Europe in the field of environmental protection.

As a strategic initiative to enhance its internationalization ability of the talents, the company attracts international talents to join Baosteel, including a foreign employee specializing in environmental protection in 2005.

In May 2004, the first annual academic meeting of Baosteel was successfully held with the theme of "Sustainable Steel, Sustainable Future". Xie Qihua, Chairwoman of the Board, delivered the theme report entitled "Sustainable Development, Thinking and Practice of Baosteel". This high-level, cross-disciplinary and open large-scale academic exchange meeting held paper sessions on four special topics including carbon steel production process technology and product R&D, metallurgical equipment and automatic control, energy saving and environmental protection and sustainable development, and stainless steel and special steel production process technology and product R&D, which attracted the experts and scholars from many famous steel enterprises, colleges, universities and scientific research institutes in the world. With the purposes of demonstrating the technical level and scientific research achievements of Baosteel, promoting the technical exchange and cooperation among domestic iron and steel enterprises and research institutes and building a platform to exchange with the world to understand overseas state-of-the-art technical status and their development trend, Baosteel Annual Academic Meeting will be held once every two years in the future.



Mr. Schwarzenegger, the governor of California State of the U.S.A. visited Baosteel.



Environmental Protection Performance 2005

Note:

Baosteel issued new shares in 2005. Thus, in the following charts, the data before 2005 is the data before the issuance of new shares and the data in 2005 is the data after the issuance of new shares. There is a major change.

Recovery condition of each surplus energy recovery device

Unit: 10,000 tons of standard coal

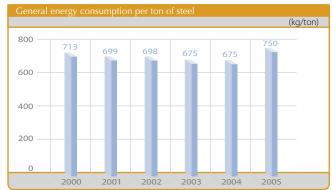
2004	2005	Increase
94	106	12
35.43	36.84	1.41
8.84	9.09	0.25
3.30	4.05	0.75
11.72	14.28	2.56
29.20	35.73	6.53
2.16	2.50	0.34
2.05	2.63	0.58
1.04	1.04	0
	94 35.43 8.84 3.30 11.72 29.20 2.16 2.05	94 106 35.43 36.84 8.84 9.09 3.30 4.05 11.72 14.28 29.20 35.73 2.16 2.50 2.05 2.63

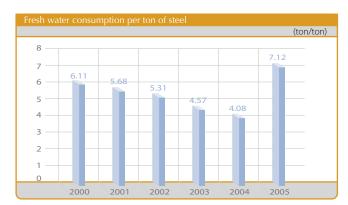
Total emission amount of main pollutants by Baosteel in 2005

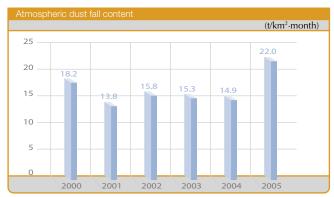
	Unit: ton
	Total emission amount
Dust	20931.5
SO ₂	43515.6
COD	4590.3
Oil	238.7

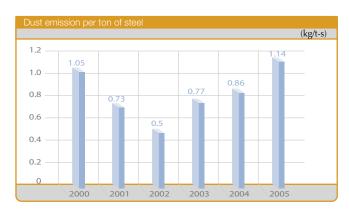


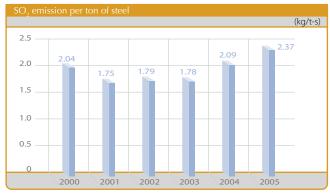


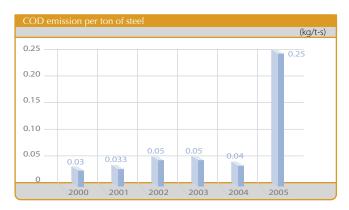


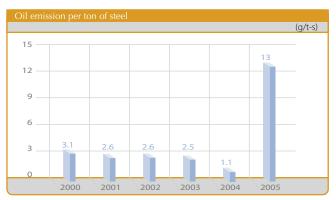












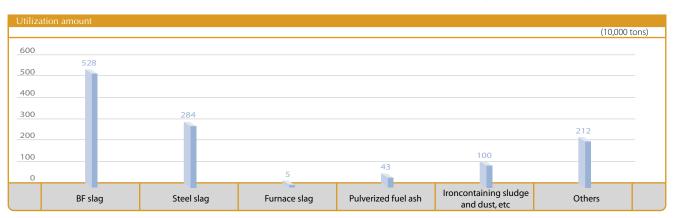








In 2005, the overall utilization ratio on industrial solid secondary resources was 98.11% and the utilization by category is shown in the diagram below.



Major Environmental Protection and Energy Saving Projects of Baosteel in 2005

Unit on project	Project Name	Main contents and effects
Baosteel Branch	The fume desulphurization revamping for No.2 unit of the power plant	The desulphurization process of the new fume desulphurization device of No.2 unit of the power plant adopts the wet limestonegypsum process. This process is the most mature and reliable technology in the world with characters of stable system operation and wide adaptability of coal category and load variation of the unit. The main equipment includes the desulphurizing agent preparation system, the fume system, the absorption and oxidation system, the gypsum treatment system, the control system, etc. After the implementation of the project, the SO ₂ emission concentration of No.2 Unit is \leq 50 mg/Nm³, the dust emission concentration is \leq 50 mg/Nm³, and the desulphurization rate of the desulphurization device is \geq 95%. The SO ₂ emission is reduced by approximately 5,000 tons every year.
Special Steel Branch	Water saving technical revamping in the "Tenth Five-year" plan	After the implementation of the project, the industrial and domestic water that was previously treated by the individual sub-plants of Special Steel Branch and discharged below standard is treated in a centralized way to further increase the circulation rate. The water has reached the Shanghai municipal Grade 2 discharge standard, effectively improving the effect on the surrounding water system.
Special Steel Branch	Revamping of industrial ovens and kilns	Special Steel Branch used to produce gas by itself. Using industrial coal as raw material, the gas plant generated a large amount of toxic and harmful gas of SO ₂ , benzene and phenol during the production, and seriously affected the environment of the surrounding area and the health of residents. After the revamping project, all the industrial ovens and kilns use clean energy (natural gas) and the pollution source is eradicated following the shutdown of self-made gas plant.
Meishan Iron & Steel Co., Ltd. (Meisteel for short)	Comprehensive sewage treatment and revamping of Ximing Channel	Meisteel discharged about 100,000 m³/d of waste water into the Yangtze River from its west discharging port, which forms a gray-black pollution belt that causes serious pollution to the Yangtze River. The main task of the project is to build a sewage treatment station with a design capacity of 100,000 m³/d and a designed water reuse ratio over 85%. Meisteel will try not to discharge any waste water in normal conditions, except for partial discharge of the waste water (meeting the standard) during the equipment overhaul and rainy season. The project imports only key equipments and valves, such high-efficiency sediment pool, filtering pool, dosing equipment and control device, etc. for sewage treatment.
Meishan Iron & Steel Co., Ltd.	Modification of northern discharging pipe	This project mainly aims at the discharge problem of sewage water and rainwater of the coking and chemical areas of Meisteel

Society

- 1. Employees
- 2. Customers
- 3 Supplier
- 4. Jointly construct a harmonious community
- 5. Concern over education
- 6. Support the remote area



Baosteel develops with the society and grows together with the employees.

It's Baosteel's strategic goal and sustainable development road to build the most competitive iron & steel enterprise in the world and create a highly respected public company.

With the pursuit of maximum enterprise value as core value, Baosteel rewards the relevant stakeholders such as customers, suppliers, employees and society, etc. with its operational performances.

Having carried the philosophy of "serve the society and reward the society" for a long time, Baosteel pays great attention to the responsibilities and obligations for the society while creating enormous economic benefits for the country and has found out a way of rewarding the society with the best effects through multi-methods.

Baosteel is a participant of the covenant on "building a global economic alliance for sustainable development" and is also a supporter of the spirit of *Beijing Declaration of Chinese Enterprises' Social Responsibility.*

While seeking healthy development of the enterprise and fostering its core competitiveness, Baosteel has always been keeping itself in harmony with the social progress and making active contribution to human development.

Employees

By December 2005, the company had in total 38875 employees, among which 5083 female.

Employee is the biggest wealth and stakeholder of the company. Holding the idea of "equal opportunity", the company respects and cherishes each employee as well as their legal rights and welfare





Education and Training

Following the talent idea of "Enterprise develops with the employee", Baosteel always puts education and training at a very important place in enterprise development, regarding training as a strategic investment and a major measure to realize equal opportunity and sustainable development of the enterprise.



With the consistent adherence to the production and operation objective of the company, Baosteel's education and training focuses on "satisfying the needs of the team and employees" and is directed by "the core value and capability elevation" with the purpose to "support the strategic development of the company". It emphasizes forward-looking, directional, demanded and systemic training. Baosteel integrates and utilizes domestic and overseas training resources and gradually forms a combined training mode of off-the-job training and spare-time training in knowledge training, professional training, post training, online training for all the employees. The average per capita training reaches 80 class hours in 2004 and 122 hours in 2005.

Structure of main training courses	
Corporate culture	Special topic seminar of corporate culture, new employee training
Management training	Post qualification training, management personnel seminar
Technical training	Engineering & technical training, professional seminar on new technology
Skill training	Operational & maintenance training, skilled personnel seminar, skill appraisal
Professional training	Comprehensive management system, 6 sigma lean operation
Internationalization ability cultivation	Business etiquette, foreign language training, overseas training, training for employee of overseas subsidiaries

Employee Welfare

The company devotes to build and improve the salary allocation system with "strong external competitiveness and obvious internal incentive" that caters the need of the strategic development of the company, in order to effectively link income with value contributed, and to earnestly guarantee the welfare, rights and interests of all employees.

- I. The company implements a salary system dominated by post salary system, which determines the employee's salary level in accordance with his/her post value and performance, and at the same time implements skill-level salary system for high-level research & development personnel, engineering personnel and business personnel based on their individual knowledge, experience and competence.
- According to national and local policies, the company participates in social insurances for basic old-age, medical treatment, unemployment, occupational injury and maternity, etc; at the same time, the company pays the public accumulation fund for housing following related policies. Baosteel provides the basic-level social security and welfare for employees through all above mentioned.
- 3. According to the economic situation and employees' welfare demands, the company executes such core welfare systems as the supplementary old-age insurance, Group Life Accident Insurance and medical insurances, and provides employees with many welfare items such as health examination, education training subsidy, working lunch, trade union mutual insurance, major disease aid, as well as welfare facilities and places such as free GYM and entertainment for employees. All to these further elevates employees' sense of belonging and the cohesive force of the company.
- 4. In strict accordance with national policies regarding employee's working hours, the company implements the standard working hour system, i.e., 8 working hours per day, 40 working hours per week. The employees enjoy the rest days, holidays, annual paid vacation and various other holidays stipulated by national laws, regulations and company rules. The employee's overtime and vacation are paid according to national policy and company system concerned.

Safety and Health Management

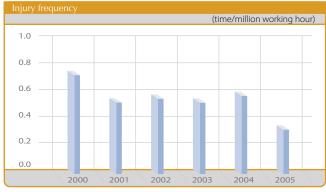
Baosteel regards safety and health as one of the most important tasks in steel production. As far as safety and health management is concerned, Baosteel has actively increased the inherent safety of the production equipment and the working environment and continuously improved and perfected all kinds of safety precautions to create a safe and healthy atmosphere.

Baosteel has established safety production commission in each steel production branches, which leads and supervises safety and health management, holds safety commission and safety work meeting twice a year to deploy safety and health efforts in accordance with Safe Production Law, and conducts safety performance appraisal to the management personnel. The safety production commission consists of managers at various levels, members of the management and employee representatives.

With the spirit of progressing with the times, seeking truth and being pragmatic, all the managers at different levels and all the employees have been vigorously promoting the scientific safety management mechanism, safe process equipment, the integration of safety, production and quality, and the modern professional safety management. They constantly exploit new measures for safety management with emphasis and focus on accident prevention.

Safety

Thanks to the efforts, the accident rate in Baosteel's production has been reduced year by year. The accident rate of each year is shown by the following figures.



Safety production and occupational health are listed as evaluation indicators in *Baosteel's Annual Operating Outline* and *Safety Objective Responsibility* is signed with managers at various levels.

Baosteel demands all the employees to make "safety commitment", develops safety production guidelines and post safety rules, disclose the main dangerous and hazardous factors of the post to all the people, strengthens safety responsibility awareness and increases the accident prevention ability, so that each employee can honor his/her commitment with a high sense of responsibility for the life of his/her own and others.

Pay attention to the inherent safety of the production site, conduct strict review for the feasibility study, preliminary design and completion acceptance of the project, take corresponding measures against the dangerous and hazardous factors to ensure that the labor safety and health facilities and the main-body project are designed, constructed, completed and put into production at the same time.

The Occupational Health and Safety Management System (OHSMS) has been vigorously advanced in Baosteel branches and subsidiaries to identify all kinds of risk sources and discover potential accidents and occupational hazards through job risk evaluation. Then correct actions are presented and put into implementation.

Health

Baosteel emphasizes the source prevention and process control of occupational hazards to achieve the objective of "creating a clean, healthy work place to improve the working life quality of the employees".

Identify hidden health troubles and record hygiene management and recovery management of the employees via supervision of occupational

health and physical examination. The occupational health examination includes: the occupational health examination executed before going on duty, on duty, when leaving the post and for acute occupational diseases; the occupational health supervision for employees exposed to occupational diseases; the supervision of contractor's (related parties') occupational health activities; the diagnose and medical observation for the suspected patient with occupational disease; and the treatment, recovery and guarantee to the patient with occupational disease.

Establish occupational hygiene management system, conduct the "simultaneous design, construction and operation" audit for occupational health of the project, develop the *Urgent Response Scheme of the Acute Occupational Hazardous Incidents* and the *Urgent Response Scheme of Radiation Accidents*, implement the "Informing System of the Occupational diseases Hazards Written in the Recruitment Contract", and conduct training on prevention of occupational disease hazards.

Investigate, identify and report the hazards factors of occupational disease; establish the "occupational hygiene documents" and conduct the periodic test and evaluation of post-related occupational diseases hazards factors.

Carry out the supervision of occupational health and establish employees' occupational health documents and occupational patient management documents.

Focus on Employees' Needs

Baosteel has been continually focusing on employee's needs to create harmonious working environment and realize common development of the enterprise and the employees.

Baosteel takes great efforts to carry out cohesion construction in compliance with the "people-oriented" principle. With scientific tools, Baosteel conducts investigation and study on employees' concerns and needs, establishes a long-term mechanism for information management of employee's need and concern; holds the "e-line aspiration" interactive communications between the management and the employees on a regular basis to understand the employees' developmental demands in time. In doing so, the employees can become the effective carrier of democratic management by providing their suggestions and contributing their wisdom regarding the weakness in the management so as to improve the company's management performance.

With the launch of the "Employees' Comprehensive Development Objective System", Baosteel pays close attention to the enhancement of the employees' comprehensive quality including competence, ideological and ethical quality, cultural and scientific quality and health quality to realize the fact that the enterprise and the employees enhance development abilities, elevate development level and share development achievements together with the same development opportunities.



Customers





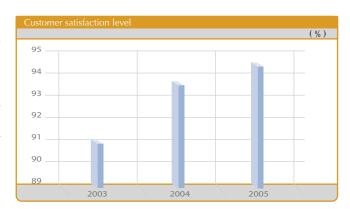


Baosteel has long been persisting with the customer-centered marketing idea, i.e., three "IS" as follows: customers' plan IS Baosteel's plan; customers' standard IS Baosteel's standard; customers' interest IS Baosteel's interest. In order to continuously upgrade our enterprise' capacity and satisfy customers' ever-growing requirements, we've been keeping on optimizing our process and enhancing our efficiency to upgrade product and service level. We provide customers with reliable products with stable quality through a lot of 6olean operation projects; We continue to shorten the delivery cycle and increase the proportion of weekly delivery through a quick manufacturing system; we supply convenient and fast sales mode for customers through e-commerce system.

What lies in the core of our corporate culture is the idea that "Customers' satisfaction is the soul of the enterprise". Baosteel always attaches great importance to customer satisfaction. As early as in 1993, we began to carry out customer satisfaction survey. With over ten years' practice and experience, Baosteel has built a reasonable customer satisfaction investigation and evaluation method with reference to domestic and overseas advanced evaluation methods in view of its own characteristics. Our method takes up quantitative analysis with mathematical statistics method on investigation findings, rectifications and return visits for unsatisfied items and common improvement of related departments based on users' suggestions. Our investigation includes 4 general items, namely quality,

service, supply ability and price, and over ten sub-items, covering customers' overall experience with our products. At the same time, our investigation targets are expanding continuously, from over 100 direct users to 280 in 2006. Due to our unceasing efforts, our customers' satisfaction keeps on boosting and always maintains at a very high level.

In order to constantly uplift customer satisfaction level, we put the unsatisfied items concerned in customer satisfaction survey into our customer information system and the responsible department will take detailed corrective actions accordingly to avoid reoccurrence of similar events. In addition to the quarterly satisfaction survey, we also put into the system customers' complaints we learned from normal visits and responsible departments will rectify it as well.



Cooperation with Customers



Automobile sheet is a strategic product of Baosteel. We have been committed to providing high-quality automobile sheets for automobile users with differential marketing tactics. In order to further strengthen our cooperation with automobile users, shorten the delivery cycle and reduce customers' inventory and fund occupation, we have worked jointly with First Automobile Volkswagen (FAV) to develop the "key account passage" project since 2003. With ERP technology and Internet technology, we have built interconnection of business information and data with FAV to reduce communication barriers among enterprises and reinforce the coordinated operation perspective between suppliers and party of demand. In particular, coordinated work and management are performed in such fields as production plan, purchase & sales management, product R & D for the party of demand, which cuts individual business management cost and sharpens both parties' competitive edge. Coordinated management and operation provide compound force for both parties' development. In July

2004, this project was officially launched and had achieved excellent economic and social benefits ever since. Besides, we have developed "key account passage" project with Shanghai GM, Chang' an Ford in succession, which have been put into operation one after another, winning customers' recognition.

Suppliers

Supplier is the solid soil for Baosteel's survival and development. In 2005, facing severe market situation under double pressures of guaranteeing supply and reducing purchase cost, Baosteel elevated the customers' value through joint investment, joint R&D, suppliers' technical progress promotion and logistics optimization with the suppliers in the spirit of developing long-term strategic cooperation relationship with suppliers.

Integrate the supplier team to realize uniform supplier management.

The year 2005 witnessed Baosteel's integrated procurement. With centralized procurement, Baosteel integrated the supplier team for each branch and subsidiary, unified the evaluation and management standard for suppliers and formulated *Supplier Management System*. As required by the Supplier Management System, the company completed the classification and appraisal of the bulk raw material and fuel supplier teams, eliminated part of the unqualified suppliers and issued certificates to excellent suppliers with stable product quality, good after-sales service and high contract performance rate in 2005.

Sign long-term strategic cooperation agreement with strategic suppliers. Devoted to realizing long-term common prosperity and development with suppliers, Baosteel continued in 2005 seeking influential suppliers with high degree of honesty in the industry both at home and abroad and with whom to set up a long-term cooperation relationship. Baosteel ensured a certain scale of annual procurement and strategic partners ensured a certain scale of resources available, which reduced the transaction cost of both parties for sourcing and accomplished mutual benefit and mutual interest. In 2005, Baosteel signed long-term strategic cooperation agreements with suppliers and forwarders such as Shanxi Coking Coal Group, Huaibei Mining Bureau, Jinchuan Group, COSCO, etc.

Conduct capital cooperation with suppliers to jointly control strategic resources. In order to encourage suppliers to develop and produce raw materials for steel making urgently needed by Baosteel and increase their confidence in production capacity expansion, Baosteel continued to intensify capital cooperation efforts with suppliers in 2005 based on the achievements made in resource investment in the previous two years. Breakthrough was made in the fields of mine, coal, raw materials of the stainless steel and wasted steel, etc., illustrated by the operation of Baovale Company, a joint venture with Australia Hamersley Company, and the construction commencement of Pingbao Company, jointly invested with Henan Pingdingshan Coal (Group).

Jointly develop new resources and new products and improve utilization technology. Baosteel wins the resources guarantee for its sustainable development by continually optimizing and adjusting the use structure of raw materials and intensifying the development of replacement resources. In 2005, coal and mine allocation teams of Baosteel adjusted the structure of raw materials timely based on the situation of raw material market and developed and tried out some new types of coal and mine. Baosteel conveyed the composition and performance requirements of new products to suppliers in time, built up joint development teams with suppliers and give instruction on their innovation in raw material development technology.

Aiming at creating the most competitive steel raw material procurement & supply chain in the world, Baosteel seeks the value maximization of each link in the value chain to realize common development with the suppliers.



A Harmonious Community by Jointly Construction

Since 2002, Baosteel has been opening itself to the society as Shanghai Industrial Sightseeing Enterprise. It held the title of "Shanghai Patriotism Education Base" in both 2003 and 2004 and was listed among the first group of industrial tourism demonstration spots in China. Centering on patriotism education and student quality education, Baosteel carefully designs tourism routes including a science popularization route named "How the Steel was Tempered", an ecological route named "Baosteel's Sustainable Development" and a process route named "Baosteel's Development Road". In 2005, Baosteel received 53,000 visitors from both home and abroad, including 46192 youngsters.

Baosteel has launched various civilization construction activities with surrounding communities and schools by offering service to the community residents in the form of volunteer team and frequently inviting surrounding residents to visit the plant area or have informal discussions to negotiate environmental protection issues of the enterprise and give top priority to issues of public concern.

Provide Energy for the Community

Baosteel Branch overcomes its own difficulty in tight gas supply to provide part of coke oven gas for residents in Baoshan District, which not only conveniences their daily life, but also plays a positive role in the prosperity and social harmony of Baoshan District. There are roughly 68 thousand households of residential users and about 800 households of corporate group users. The total annual gas supply is approximately 42 million Nm³.

Located on northern side of Luojing Town in Baoshan District, Baosteel Branch Reservoir and Shanghai Chenhang Reservoir adjoin each other. As one of the main water sources of Shanghai. Due to the small effective storage capacity, Chenhang Reservoir has very limited adjustment and storage capacity when the Yangtze River enters dry season influenced by the intrusion of salty tide in winter, leading to the conflict of unsafe quantity and quality of water supply. In order to alleviate the water supply issues of Chenhang Reservoir at the time of salty tide, Baosteel adopts emergent temporary water supply scheme to provide water for Chenhang Reservoir by utilizing the unique advantages and storage technology of Baosteel Branch reservoir when the Yangtze River is under the influence of salty tide, especially when the content of chlorine ion in the raw water of the Yangtze River stays high. This initiative substantially alleviates the water supply gap in winter for Shanghai Chenhang Reservoir and contributes to the improvement of drinking water quality for Shanghai citizens.



Support the Development and Utilization of Renewable Energy

Developing green power is not only a major measure for Shanghai to honor its Expo application promise-"Better City, Better Life", but also an inevitable requirement for Shanghai to implement sustainable development strategy.

Shanghai green power mechanism encourages users to select and subscribe green power by paying more expenses voluntarily. The implementation of the green power mechanism is far-reaching to raise the enterprise citizens' social responsibilities and the public's environmental protection awareness as well as to build a resource conservation-conscious city. In order to support the smooth development of Shanghai green power, Baosteel subscribed the first batch of green power in Shanghai voluntarily and actively, ranking top among all the subscribing enterprises in both subscription quantity and subscription period.



Charity and Donation

The idea of "offering love through supporting the weak and helping the poor" is also deeply rooted in the minds of all Baosteel employees, whose "one-day donation" totals over RMB10 million. In January 2005, Baosteel employees donated RMB1million to the victims of earthquake and tsunami in India Ocean.

In Baosteel, about 6000 young employees have become "Registered Young Volunteers of China" and over 1000 people have voluntarily participated in "Sample Collection of Hematopoietic Stem Cell for China Marrow Donor Program". In March 2005, the Youth League Committee of Baosteel Branch launched a proposal called "Ignite hope for life with youth-Young Blood Donation Volunteers Initiative", which has gathered over 480 volunteers until now.

Concern over Education



While creating considerable economic and social benefits, Baosteel always keep in mind to reward the society with a long-term mechanism to subsidize education and culture undertakings. Founded in 1990, "Baosteel Education Fund" with the total amount of RMB100 million is the most renown education award nationwide "funded by state-owned enterprises, supported and instructed by the government and participated by colleges and universities", which is selected by leading scholars in domestic education circle and science circle and is also the earliest scholarship for higher education set up by the state-owned enterprises. "Baosteel Education Fund" has rewarded 11697 excellent teachers and students from 118 colleges, universities and science & technology institutes. The reward and subsidy to the education circle has accumulated to RMB85 million during the past 16 years.

In September 2005, "Baosteel Education Fund" was expanded to RMB150 million with the addition of RMB50 million, a special way to commemorate the 20th anniversary of Baosteel's launch "85-9" (September 1985), which is not only the reflection of the idea of "enterprise develops with the society" advocated by Baosteel, but also the sincere reward to the society by Baosteel people.

Baosteel has donated nearly RMB10 million for "Hope Project". 38 hope primary schools were fully-funded or partially-funded by Baosteel in the Midwest areas and areas along the Long March route by the Red Army.

"Baosteel Elegant Art Rewarding Fund" of RMB10 million was set up to mainly support such art groups as Beijing opera, Ballet and children's literary and art with the purpose to "support elegant arts and carry forward the excellent national culture". For over ten years, 61 excellent works, 249 excellent literary and art workers, 19 excellent literary and art groups and 10 art organizations have won the award and support. Winners include Huang Doudou, Liao Changyong, etc. who enjoy high prestige both at home and abroad.

Support the Remote Area







In recent years, Baosteel has input poverty alleviation fund of RMB13.867 million in total in Simao area of Yunnan Province, the focus area of its support. By October 2005, 12 hope primary and middle schools and 32 health centers and clinics had been set up, in 9 villages the program of enough food and clothing had been implemented, 1601 people had been supported in their study by "1+1" project and 196 households of thatched cottages and branched cottages have been modified. "Baosteel Central Health Center" was established in De'an Township, Puerhani & Yi Nationality Autonomous County, which fundamentally solved the difficulty of seeing doctor for 12 thousand people in the neighboring area.

Baosteel has provided more than RMB20 million to support Zhongba County in Rikaze area, Tibet. The fund mainly supports the grass roots, peasants and herdsmen with an effort to improve their production and living conditions.

Operation

- 1. Sales volume
- 2. The procurement of raw materials and fuels
- 3. Capital suppliers
- 4. Tax

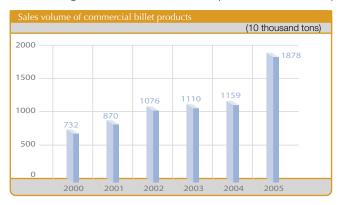


Baosteel has already possessed a production capacity of 20 million tons of irons and steels with three manufacturing systems, namely carbon steel (mainly plates, tubes and wire rods), stainless steel and special steel, and has formed the largest premium steel product base in China for automobile and household appliance steel, stainless steel, ship and tube wire steel, electric steel and special metal materials, seamless tubes for oil and electricity industries, and new-type construction steel.

Sales Volume

In 2005, the company sold 18.7848 million tons of commercial billet products and realized sales revenue of RMB126.608 billion and net profit totaling RMB18.304 billion, which hit the historic record.

The changes in sales, sales volume and total profit of commercial billet products of the company from 2000 to 2005 are shown in the following chart:





Marketing

Baosteel has been dedicated to segmentation of geographical markets to provide closely, convenient and quick marketing services to its clients for many years. The segmentation of geographical markets can create more added values to clients, form a value chain system of the consistent interest between Baosteel and its clients and strengthen Baosteel's capability to control local clients and markets.

At present, the company has established eight major regional specialized firms and sixteen shearing and processing centers in China, both of which are responsible for the sales and processing of various steel products as well as supplier management, contract execution, logistic storage, dissent handling, customer service and information collection, etc. After many years of efforts, they have become a bridge facilitating the communication between the company and its clients with excellent service brand. With rich experience in marketing, these regional firms and shearing and processing centers, together with the sales centers of the company, have shaped Baosteel's unique marketing model that is hard to copy.

The company reinforces constantly its regional marketing service system mainly composed of regional firms and supplemented by the shearing and processing centers. Further, it actively studies the network channel distribution and optimizes its regional coverage to solve the uneven channel distribution and fill in the blanks in marketing strategy.

Following the acquisition and issuance of new shares, the company constantly optimizes the linkage between production and sales to improve its service level in an all-round way and to strengthen its ability to develop and satisfy clients steadily through delivering goods on a weekly basis, dispatching representatives to clients and building an elaborate logistics system, etc. With uniform technical review, dissent handling, user code and logistics control, uniform sales service and optimized resource configuration have become a reality for most products.

The following table shows the sales of commercial billet products of the company in 2005:

Unit: 10,000 tons

	2005	Percentage of the total	2004	Increase or decrease
Carbon steel	1,745.32	92.91%	1,158.98	over the previous year 50.56%
Among which: hot rolled products	666.57	35.48%	274.13	143.16%
Cold rolled products	674.33	35.90%	660.64	2.07%
Slab products	239.24	12.74%	58.26	310.64%
Wire products	57.49	3.06%	57.91	-0.73%
Steel tube products	107.69	5.73%	108.04	-0.32%
Stainless steel	68.95	3.67%	-	-
Among which: cold rolled products	26.65	1.44%	-	-
Hot rolled products	39.83	2.13%	-	-
Slab products	2.47	0.11%	-	-
Special steel	64.23	3.42%	-	-
Total commercial slabs	1,878.48	100%	1,158.98	62.04%

Most of the products are sold in domestic market to meet the increasing demand of domestic downstream industries for high quality steels. In the meantime, 10 percent of the products are exported to abroad every year for two purposes: on one hand, it will increase the company's international popularity; on the other hand, it will help the company track the world's advanced technology development. In 2005, the company seized the opportunity of gradual return to boom in the European and American markets, timely strengthen its effort for product export and vigorously foster the overseas direct customers and strategic client group. As a result, the company developed seven strategic and prospective strategic clients and signed export contracts for carbon steel products of approximately 2.09 million tons for the whole year, thereby effectively avoiding domestic market risks.

In 2005, the domestic sales of the commercial billets accounted for 89.4 percent and the overseas sales represented 10.6 percent.



The Procurement of Raw Materials and Fuels

In order to stabilize supply, effectively control and reduce cost and strengthen the management of core procurement business, the company has formed a risk-and-profit-sharing strategic supply relationship with its main suppliers.

The company's bulk procurement scheme of raw materials and fuels was formally launched in the second half of 2004 and implemented in a full scale in the second half of 2005.



Ore

The scale and base price are fixed by annual contract. Major suppliers include CVRD, Rio Tinto (Hamersley), BHBP and MBR.



Coal

The scale is fixed by long-term agreements (usually for three years) and the price is established through annual contract, while part of the varieties can be revised through consultation in accordance with market changes. Major procurement channels include Shanxi Coking Coal, Shenhua Group, Pingdingshan Coal, Huaibei Coalfield, Yongcheng Coal & Electricity, Yitai Group, Kailuan Group, Yanzhou Coal and Zaozhuang Coal Group.



Coke

The quantity is fixed by annual contract and the price set on a monthly basis.



Other raw materials

The procurement of other raw materials such as waste steel, pig iron and stainless steel material (excluding nickel) mainly purchased in the market directly, dominated by spot commodity resource.



Transportation

- Ocean transportation: The ocean shipping volume is delivered based on agreements ranging from 3 to 20 years signed in the long-term COA with the large international shippers like NYK, BORGESEN, NEU and ZODIAC. The remaining goods are shipped with annual COA and just-intime ship-renting according to spot market conditions.
- 2. Domestic transportation: The raw materials such as ore and coal are transported on the water based on annual transportation agreement signed with large domestic shippers. So far as ore is concerned, the company signed long-term agreements with major domestic wharfs to reduce and transfer the load except Majishan Port that undertakes the transfer business. There are also some goods transported on land through annual agreements with the railway authorities.

Based on the centralized procurement of bulk raw materials and fuels, the company established a uniform raw material procurement and supply system, formulated a uniform supplier evaluation standard and uniform waste steel procurement and acceptance standard, and realized uniform allocation of raw materials among various steel production units; the procurement and supply chain project is progressing steadily and the integrated procurement starts to show its cost effectiveness.

Capital Suppliers

Interest Expenditure over the Years

Currently, the company's main partner banks are: China Construction Bank, Industrial and Commercial Bank of China, Bank of China, Bank of Communications and HSBC Shanghai Branch.

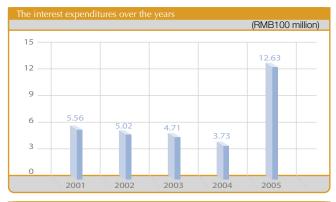
Dividend Allocation Principle and Bonus Program

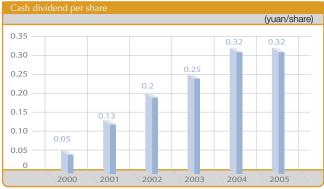
According to the Corporate Charter, the allocation order of the company's after-tax profit is as follows: making up losses, taking statutory common reserve fund, taking optional common reserve fund and paying the dividend of common stocks. The statutory common reserve fund equals to 10 percent of the company's after-tax profit and may not be taken when its accumulated amount reaches 50 percent of the company's registered capital. In accordance with the national laws, administrative regulations and the company's operating performance and development needs, the Board of Directors decides specific proportions of the optional common reserve fund to be taken and the dividend of common stocks to be paid, and submit to the shareholders' general meeting for approval. The company shall not allocate dividends before the loss is made up and the statutory common reserve fund is taken. The shareholders' general meeting in 2004 passed The Resolution on the Cash Dividend Policy of Baoshan Iron & Steel Co., Ltd., stating that the cash dividend allocated every year should not be lower than 40 percent of the net profit of the same year.

In 2005, the company's second conference of Board of Directors passed a resolution promising that the cash dividends in the profit allocation programs for the years of 2005, 2006 and 2007 would not fall below RMB0.32 per share. In compliance with the policy direction on dividend tax adjustment, this is helpful to improve the company's operation environment and safeguard all the shareholders' interest. Meanwhile, the company is well equipped with conditions such as its good performance and sufficient cash flow to implement this dividend allocation program.



In 2005, the company issued 5 billion new shares, including 3 billion state shares to Baosteel Group Company and 2 billion shares to the public.

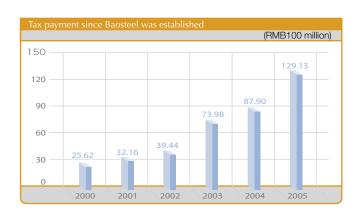






Tax

Thanks to its honest operation, the company has achieved considerable economic and social benefits. From 2001 to 2005, the accumulative tax of various kinds paid to the state amounted to RMB38.823 billion. Among the national top 100 taxpayers, Baosteel ranked No. 7 in 2003 and No. 6 in 2004.



Appendix

Honors

In May 2005, Baosteel won the honor of "State Environment-Friendly Enterprise", the highest honor on environmental protection for enterprises.

In 2005, Baosteel topped the list of "Most Responsible Enterprises" in China with its outstanding performances in five aspects, namely, leading position in the industry, honesty and law-abidingness, people-oriented spirit, green environmental protection and reward to the society; and also won the title of "Most Respected Listed Company in China" and "Best Progress Award for Investor Relationship" in 2005. In addition, Baosteel held the third place in global steel industry in the popularity list of "Most Respected Enterprises in the World", most recently issued by the *Fortune* magazine in USA..

On October 26th 2004, Han Zheng, Mayor of Shanghai Municipality, spoke highly of Baosteel's contribution to the economic development, the improvement of living environment and the improvement of people's living quality of Shanghai at the Working Conference of Shanghai Environmental Protection and Construction Coordination and Promotion Meeting.

In December 2005, Baosteel demonstrated its image as an "Environment-Friendly Enterprise" from multi-perspectives in an all-round way at the National Exhibition of Building a Conservation-conscious Society, attracting wide attention from all walks of life. On the night of December 21st, leaders from the Central Government including Wen Jiabao, Huang Ju and Li Changchun visited Baosteel's exhibition sector. They fully affirmed Baosteel's achievements in environmental protection and energy conservation and expressed ardent expectations for Baosteel's development.

Events of Sustainability Activities

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January Passed the ISO 14001 Certification of Environmental Management System by Huaxia Certification Center

June Passed UKAS Certification

Meisteel was awarded the title "1998-1999 Advanced Enterprise for Environmental Protection in Nanjing" Meisteel won the "Three simultaneous" Prize for environmental protection awarded by the Bureau of

Metallurgical Industry.

2000

May Awarded the title "1998-1999 Outstanding Unit for Environmental Protection in Shanghai"

2001

May Passed the first verification for ISO14001 certificate renewal

November Listed among "Shanghai top ten enterprises for resource conservation and comprehensive use"

by Shanghai Economic Commission

2002

May Listed among the first group enterprises in Shanghai entitled to use "state water saving emblem"

October Opened to the public as the sole tourist site for urban industrial tourism in Shanghai and was officially on the short list of Model Spot for National

Industrial Tourism

 $Me is teel\ was\ awarded\ the\ title\ "2001-2002\ Outstanding\ Unit\ for\ Environmental\ Management"\ by\ China\ Iron\ \&\ Steel\ Association.$

Meisteel was awarded the title "1998-1999 Advanced Enterprise for Environmental Protection in Nanjing"

2003

April Awarded the title "Outstanding key metallurgical enterprise for environmental protection on state level" by China Iron & Steel Association

September 1550 cold rolling strip steel project won the title "top 100 projects for environmental protection on state level".

Meisteel was awarded the title "Outstanding unit for model and hygiene in Nanjing"

2004

June

March Awarded the title "State model enterprise for environmental protection" by China Administration of Environmental Protection

May Baosteel's "short flow slag processing technology" won gold prize at the 2nd International Patent and Famous Brand Exposition of China held in

Qingaao

Awarded the title "2002-2003 model unit for environmental protection in Shanghai" by Shanghai Environmental Protection Bureau and Shanghai

Personnel Bureau

BSI inspected Baosteel's comprehensive management systems and the quality, occupational health & safety and environmental management

systems all passed certification.

Released the environmental report to the public for the first time $% \left\{ \left(1\right) \right\} =\left\{ \left(1\right) \right\} =\left$

September Awarded the title "state outstanding unit for greening in metallurgical industry" by National Greening Committee in Metallurgical Industry

November "short flow slag processing technology" was awarded gold prize in "Ideas, Inventions, New Products Exhibition" held in Nuremberg, Germany

Meisteel was awarded the title "2003-2004 Advanced Enterprise for Environmental Protection in Nanjing"

2005

May Listed among the first group green power users in Shanghai, the largest green power

subscription for one time

Won the title "state environment-friendly enterprises" for the first time in the metallurgical industry

Huangshi Coating Sheets Co. Ltd was awarded the title "Environment-friendly Enterprise in Hubei Province"

Meisteel was awarded the title "2001-2005 Outstanding Unit for Environmental Protection by the Environmental Protection Branch of the Chinese

Society for Metals.

Governance Structure of the Company

The Company has established a fairly perfect legal person governance system in accordance with *Company Law, Securities Law* and related stipulations of China Securities Regulatory Commission as well as the requirement of *Stock Listing Rules of Shanghai Securities Exchange.*

The company implements honest operation and transparent management with strict and effective internal and external audit and supervision, timely and accurate continuous information disclosure as well as good and interactive relationship with investors.

The company is one of the earliest companies to establish independent director system and independent supervisor system. The proportion of independent directors and independent supervisors reach one-third in the Board of Directors and Board of Supervisors.

The company sets up some professional committees under the Board of Directors: Salary and Evaluation Committee, Audit Committee and Strategic Committee. The first two committees are headed by independent directors who account for two-thirds of the members; however, in the last committee, they only account for one third of the members

Evaluation and incentive mechanism for senior management, establishment and implementation of relevant rewarding systems

The senior management of the company are responsible for and evaluated and assessed by the Board of Directors (BOD). Various annual production and operation indexes established by BOD will become the objective after the approval of the shareholders' meeting. The Board of Directors conducts annual evaluation and incentive to the senior management of the company.

Board of Directors Meeting

- (1) On March 14, 2005, the 9th Meeting of the Second Board of Directors;
- (2) On April 29, 2005, the 10th Meeting of the Second Board of Directors;
- (3) On June 27, 2005, the 11th Meeting of the Second Board of Directors;
- (4) From July 26 to 28, 2005, Temporary Board of Directors Meeting was held in the form of voting by correspondence;
- (5) On August 29, 2005, the 12th Meeting of the Second Board of Directors;
- (6) On October 29, 2005, the 13th Meeting of the Second Board of Directors.

Board of Supervisors Meeting

- (1) On March 14, 2005, the 9th Meeting of the Second Board of Supervisors;
- (2) On April 29, 2005, the 10th Meeting of the Second Board of Supervisors;
- (3) On August 29, 2005, the 11th Meeting of the Second Board of Supervisors;
- (4) On October 29, 2005, the 12th Meeting of the Second Board of Supervisors.

Shareholders' Meeting

- (1) The 2004 Shareholders' Meeting was held in Qingdao on April 30, 2005;
- (2) The First Temporary Shareholders' Meeting of 2005 was held in Beijing on August 12, 2005.

Subsidiaries

Major Domestic Subsidiaries

Yantai Lubao Steel Tube Co., Ltd.

Address: 185 Middle Xingfu Road, Yantai, Shangdong Province

Baosteel Huangshi Coated Sheet Co., Ltd.

Address: 18 Hangzhou (W) Road, Huangshi City, Hubei Province

Baosteel Nippon Steel Auto Sheet Co., Ltd.

Address: Cold-rolled Comprehensive Building, #5 Neiwei Road, Plant area of Shanghai Baoshan Iron & Steel Co., Ltd

Shanghai Meishan Iron & Steel Co., Ltd.

Address: Xinjian, Zhonghuamenwai, Nanjing, Jiangsu Province

Ningbo Baoxin Stainless Steel Co., Ltd.

Address: Economic & Technology Development Zone, Zhejiang Province (Beilun-Xiapu)

Shanghai Baosight Software Co., Ltd.

Address: 515 Guoshoujing Road, Zhangjiang High-tech Park, Pudong New Area, Shanghai

Shanghai Baosteel International Economic & Trading Co., Ltd.

Address: Baosteel Building, 370 Pudian Road, Pudong New Area, Shanghai

Overseas Subsidiaries

Howa Trading Co., Ltd.

Address: 102-0082, Howa Building, 15 Banchi, Ichiban-Cho, Chiyoda-Ku, Tokyo Japan

Tel: 81-3-3237 9121 Fax: 81-3-3237-9203

Baosteel Australia Trading Co., Ltd.

Address: 1/F, 189 Pas George Avenue, Australia Tel: 61-8-9481-0535 Fax: 61-8-9481-0536

Baosteel Hong Kong Trading Company Limited

Address: Room 2901, 29/F. Office Tower, Convention Plaza, 1 Harbour Road,

Wanchai, HONGKONG

Tel: 852-2827 7773 Fax: 852-2879 4811

Bao-Trans Enterprises Ltd.

Address: 29/F. Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, HONGKONG

Tel: 852-2528-5766 Fax: 852-2529-5117

Bao-Island Enterprises Limited

Address: 29/F., Harbour Centre, 25 Harbour Road, HONGKONG

Tel: 852-2833 3223 Fax: 852-2827 0001

Baosteel Singapore PTE LTD.

Address: 6 Temasek Boulevars #25-02 Suntec Tower Four SINGAPORE 038986

Tel: 65-6333 6818-101 Fax: 65-6333 6819

Baosteel America INC.

Address: Continental Plaza 1, 1/F 401 Hackensack Ave. Hackensack, NJ 07601, USA

Tel: 1-201-457 1144 Fax: 1-201-457 0909 / 001-201-457 1777

BAOVALE MINERACAO S.A.

Address: Rua Lauro Muller116, Sala3103 CEP22299-900, Rio De Janeiro RJ BRASIL

Tel: 55-21-2531 1363 Fax: 55-21-2531 0298

BAOSTEEL DO BRASIL LTDA

Address: Rua Lauro Muller116, Sala3103 CEP22299-900, Rio De Janeiro RJ BRASIL

Tel: 55-21-2531 1363 Fax: 55-21-2531 0298

BAOSTEEL TRADING EUROPE GMBH

Address: 1 Nonnenstieg Avenue, Hamburg, Germany Tel: 49-40-4199 4101 Fax: 49-40-4199 4120

Contact Us

Board Secretariat of Baosteel

Baoshan Hotel, No. 1813 Mudanjiang Road, Baoshan District, Shanghai, China

Post code: 201900

Tel: +86-21-26647000,

Fax: +86-21-26646999

E-mail: ir@baosteel.com

Environment and Resource Department of Baosteel

Baoshan Hotel, No. 1813 Mudanjiang Road, Baoshan District, Shanghai, China

Post code: 201900

Tel: +86-21-26643172, Fax: +86-21-26643433

E-mail: sustainability@baosteel.com

Please visit our website http://www.baosteel.com/ for more information on sustainable development report, annual report, etc.

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