2018 ANSTEEL GROUP CORPORATION LIMITED Sustainability Report







About the Report

















2014 2015



2013



2017

Dear readers.

Welcome to read the Twelfth Ansteel Group Corporation Limited Sustainability Report. Based on feedback information and suggestions from various channels, the report elaborates on social responsibility practices of Ansteel Group in business operation, products and services, environmental protection, staff support and community development.

Reporting Period

The report discloses information dated between January 1, 2018 and December 31, 2018. Part of the report may refer to previous years as needed.

Report Boundary

With Ansteel Group Corporation Limited (hereinafter referred to as Ansteel Group, or We) as the main body, the report covers Anshan Iron & Steel Group Co., Ltd. (hereinafter referred to as Anshan Iron and Steel) and Pansteel Group Co., Ltd. (hereinafter referred to as Pansteel) as well as their non-steel industry sectors and directly affiliated entities.

Release Cycle

This report is released annually.

Reference Standards

- GB/T 36001-2015, Guidance on Social Responsibility Reporting issued by
- Standardization Administration of the General Administration of Quality Supervision, Inspection and Quarantine
- Guidelines for the State-owned Enterprises Directly under the Central Government on
- Fulfilling Corporate Social Responsibilities issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

- The GRI Sustainability Reporting Standards (GRI Standards) issued by the GRI Global Sustainability Standards Board (GSSB)
- ISO 26000: 2010, Guidance on Social Responsibility issued by International Organization for Standardization (ISO)
- Guidelines for Fufilling Social Responsibility by Chinese Industrial Enterprises and Industrial Associations (GSRI-CHINA 2.0) issued by China Federation of Industrial Economics (CFIE)
- Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) issued by Chinese Academy of Social Sciences (CASS)

Report Guarantee

The financial data included in the report conform to Accounting Standards for Enterprises and relevant accounting systems issued by the authority, and have been audited in accordance with Internal Audit Standards of China, thus releasing actual financial indicators and operational conditions of Ansteel Group. All the sums of money in the report are in the unit of CNY unless otherwise stipulated. The report has been internally audited, which ensures its authenticity, accuracy and completeness.

Access to the Report

The report is issued in printed and electronic versions in both Chinese and English. For the electronic version, please visit Ansteel Group's official website http://en.ansteel.cn

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Message from the Senior Management







Dai Zhihao, President, Ansteel Group

The central state-owned enterprises are the ballast of the national economy, the pillar of the people's livelihood, the reassurance of crisis, the main force of poverty alleviation, the pioneer of regional coordination, the builder of a beautiful China, and the vanguard of CSR fulfillment overseas, leading the construction of CSR management system in China. Over the years, Ansteel Group has been earnestly shouldering the responsibilities in the areas of national strategy, national defense and security, national economy and the people's livelihood with a keen sense of political responsibility and historical mission. Especially since the 18th CPC National Congress, we have been actively taking the lead in fulfilling our responsibilities on major issues such as poverty alleviation, the Belt and Road Initiative, and ecological conservation, and made positive contributions to the sustainable and healthy economic and social development.

In 2018, Ansteel Group implemented the guiding principles of the important speeches by General Secretary Xi Jinping on the revitalization of the Northeast China, comprehensively consolidated the achievements we have made in practicing the requirement of "nirvana and rebirth", accelerated our pace of transformation and upgrading, and vigorously promoted high-quality development.

Operation Performance Hit a Record High. In 2018, Ansteel Group's operating revenue surpassed the RMB 200 billion threshold for the first time, reaching RMB 215.77 billion, with RMB 2.07 billion of total profit, a year-on-year increase of RMB 6.8 billion on the basis of dealing with the remaining historical problems of RMB 11.2 billion. Both operating revenue and profit hit a record high. The corporate influence has been significantly enhanced, with the brand value standing at RMB 63.528 billion, RMB 6.473 billion higher than that of the previous year. Ansteel ranks 55th among the top 500 most valuable brands in China. Ansteel Group won the laurel of the "40 Brands of the 40 Years of Reform and Opening-up" on the CCTV "the Growing of the Great Brand" program. Guo Mingyi won the title of "Pioneer of Reform". In addition, Ansteel Group ranked 428th among the 2018 Fortune Global 500, the best ranking in history.

Development Model Keeps Constant Improvement. We achieved the annual target of the "631" industrial structure adjustment. We participated in the first China International Import Expo and sponsored the Green, Intelligent Manufacturing and Win-win Steel Industry Chain Cooperation and Development Forum, signing over RMB 20 billion deals. We pursued low-carbon development to build a beautiful Ansteel Group. Angang Steel Company Limited Bayuquan Steel Subsidiary was listed into the Top 10 Excellent Green Companies. We vigorously cultivated new industries and new forms of business. Adopting the "Internet + service" model, we developed an Internet industrial ecosystem composed of steel e-commerce, processing and delivery, modern logistics, big data centers, and finance. The industrial service industry has become the new driver of development and growth point of Ansteel Group. The profitability of the resource industry has increased significantly. The cost of ore per ton in Ansteel Mining Company Limited has decreased by RMB 15, with obvious cost advantage. We yielded a profit of RMB 5.18 billion in vanadium and titanium, and our industrial development entered a virtuous circle.

Core Competitiveness was Comprehensively Improved. We continued to drive development through innovation and deepened the reform of innovation system and mechanism. We set up the Central Research Institute of Ansteel Group, two expert advisory committees and the National Vanadium and Titanium New Material Industry Innovation Center. Two of our green development and innovation achievements won the first prize and second prize of National Science and Technology Progress Award. The series of high-end products were used in domestic key projects such as the home-built aircraft carriers, the Hualong One nuclear reactor and the Hong Kong-Zhuhai-Macao Bridge, becoming the backbone of the country. The number of staff innovation studios increased to 205, where a number of extraordinary craftsmen such as Lin Xuebin, the winner of the "China Skills Award", have emerged. We stepped up the integration of the industrialization and informatization by cooperating with Alibaba Cloud to build the "Iron Brain" and with Kingsoft Cloud to build the "Steel Cloud". The smart mine project and heavy plate project became the pilot and demonstration project of national smart manufacturing, leading the construction of the national "smart and transparent factory".

Winning the Three Critical Battles. We prevented and controlled pollution. In recent years, more than RMB 12 billion has been invested and more than 260 projects on energy conservation, emission reduction and pollution control have been implemented to ensure that the pollutant discharge meets the national standards for the steel industry. The production enterprises along the Jinsha River water system increased the pollution prevention and control efforts. Anshan Iron and Steel Co., Ltd. Bayuquan Subsidiary and Pansteel Xichang Steel & Vanadium Co., Ltd won the titles of 2018 Top 10 Excellent Green Companies and the 2018 Advanced Green Enterprises. We forestalled and defused major risks. Focusing on de-leveraging, debt reduction, and risk prevention, we signed a RMB 34 billion debt-to-equity swap cooperation agreement with financial institutions, and completed market-oriented debt-to-equity swap of RMB 17.4 billion, continuously bringing down the asset-liability ratio. We carried out targeted poverty alleviation. By implementing the principles of the SASAC Poverty Alleviation Work Conference, we comprehensively promoted poverty alleviation by spurring local industries and improving people's livelihood, medical services, and education. We allocated RMB 27.32 million poverty alleviation funds, a year-on-year increase of 94.6%, earnestly fulfilling our corporation social responsibility as a central SOE.

Employees' Sense of Achievements and Happiness Further Enhanced. Adhering to the principle of joint contribution for shared benefits, we carried out the special service action of "Pursuing the idea of shared benefits and caring for the frontline employees" and initiated 586 new projects to improve the working environment and welfare facilities for the staff; the paid vacation was standardized to ensure the physical and mental health of employees; and the underground workers enjoyed a pay raise, with the underground subsidy incorporated into the salary performance management. We shared the development results with 142,000 employees by giving them rewards and established the employee salary growth mechanism, with an average per capita income growth of 14% within the Group. The officials and employees have taken on a new look. We successfully held the second staff sports meeting that saw more than 1,500 employee athletes from Anshan, Panzhihua and Guangzhou competing in the same field for the first time, further enhancing the Group's cohesiveness. We visited 48,600 employees in hardships and retirees, and distributed RMB 21.03 million of relief funds. Employees have felt a stronger sense of achievements and happiness.

The year 2019 marks the 70th anniversary of the founding of the People's Republic of China. It is also a decisive year in building a moderately prosperous society in all respects and a critical year for Ansteel Group to speed up the transformation and upgrading and embark on a path of high quality development. It was pointed out at the Central Economic Work Conference that China is still and will long remain in an important period of strategic opportunity and great promises. We must dialectically look at the changes, enhance the sense of urgency, maintain the strategic focus, stay confident, take the initiative and keep a firm hold on important strategic opportunities. We need to comprehensively promote corporate reform, technological innovation, industrial upgrading, management improvement, and the principle of joint construction for shared benefits. With these efforts, we will open a new chapter of high-quality corporate development, and fulfill social responsibility in a more systematic and efficient manner.



Feature

70 Years of Sheer Endeavor Launches Us on a New Journey in the New Era

70 years ago, the war-shattered Ansteel Group was returned to the hands of the people and officially started operation in July 1949, and created a number of "firsts" in the steel industry and made historic contributions to the development of China's national economy. It was known as the "Eldest Son of the Steel Industry of the Republic" and the "cradle of China's steel industry".

Over the past 70 years, we have pressed ahead defying all odds. We always bear in mind the solemn entrustment and expectation of generations of Party and national leaders. Remaining true to our original aspiration and keeping our mission firmly in mind, we have blazed new trails in this land of promise, written a glorious chapter of the steel power, and vowed to bring better lives for the people with better materials.

2018

- In 2018, Ansteel Group produced 40.49 million tons of iron concentrate, 34.76 million tons of iron, 37.36 million tons of steel and 34.91 million tons of steel products. We produced 1.004 million tons of titanium concentrate, 228,000 tons of titanium dioxide and 3,720 tons of other titanium products. The business volume of vanadium products was 39,800 tons.
- Anshan Iron and Steel's new products, exclusive leading products and strategic products accounted for 12.4%,
 29.8%, and 69.3%, respectively, of its total products, while Pansteel's leading products accounted for 49.6%.
- Ansteel Group's operating revenue reached RMB 215.77 billion, with the total profit at RMB 2.07 billion.
- We won the laurel of "40 Brands of the 40 Years of China's Reform and Opening
 -up" on the CCTV "the Growing of the Great Brand".
- Our brand value increased 11.3% to be RMB 63.528 billion, which is RMB 6.473 billion higher than that of the previous year.

Realizing a Great Leap in Steel and Iron Production

70 years ago, Ansteel Group started on a heap of rubble with an annual iron production capacity of 500,000 tons and steel production capacity of 580,000 tons. We could only smelt 25 kinds of steel and produce 21 varieties and 97 specifications. In 1978, the beginning of China's reform and opening-up, Ansteeal Group's annual production capacity of iron, steel and steel products stood respectively at 6.4 million tons. 6.86 million tons and 3.85 million tons.

Today, Ansteel Group has a steel production capacity of 39.326 million tons. We can produce 3,000 grades, over 60,000 products specifications of steel and vanadium titanium products with high technology and high added-value, covering:

- A complete steel product portfolio covering hot rolling plates, cold rolling plates, galvanized plates, color coated plates, cold rolling silicon steel, heavy rails, seamless steel pipelines, steel bars, steel wires, steel ropes, and stainless steel:
- A series of vanadium products including vanadium nitrogen alloy, vanadium trioxide and high vanadium ferroalloy;
- A series of titanium products including high titanium bearing slag, titanium dioxide, sponge titanium, and other titanium products.





Making Significant Headway in Deepening Reform

Before 1988, Ansteel Group was the largest industrial enterprise in China, ranking first among Chinese enterprises in terms of industrial output value and tax contributions. However, due to the severe impact of the planned economy, the development of Ansteel Group bottomed in the mid-1990s with sales decline of products, increased inventory, and extremely tight capital flow.

After deepening reform, we now have seven high-end steel production bases of special steel in northeast, southwest, and southern China. We have rich iron ore resources in Liaoning and Sichuan, China and in Carrara, Australia. Ansteel Group is an iron & steel enterprise in China with the biggest resource advantage. We have a whole set of advanced iron & steel production equipment covering mining exploitation, sintering, iron-making, steel rolling as well as coking, fire resistance, driving force and transport, etc. We have capabilities of mine, complete steel production technology and management ability output.





The most internationally competitive large-scale steel base with a complete product line based on high-end plates.



A world-class rail steel base, the world's largest vanadium product base, and the largest titanium material base in China.



The world's leading large-scale coastal green model steel base built by independent integration and innovation, with advanced technology, equipment and transportation advantages, mainly producing high-end plates.



Regional steel base, mainly producing high-end plates.



The most competitive quality plate base in Southwest China, mainly producing high quality automotive and home appliance plates.



High-end special steel and high-end metal materials base, mainly producing special alloy steel, special stainless steel, tool steel, titanium and titanium alloy.



The most comprehensive stainless steel base in southern China, mainly producing stainless steel plates of various specifications.

Achieving Multi-dimensional Development through Industrial Adjustment

Over the past 70 years, we can see the application of Ansteel products from the ten major buildings in Beijing at the 10th anniversary of the founding of the People's Republic of China to the key national projects such as the Wuhan Yangtze River Bridge, the Three Gorges Dam, the Beijing-Kowloon Railway, the Qinghai-Tibet Railway, the West-East Gas Pipeline, and the South-to-North Water Transfer, and from the Type 59 tanks, carrier rockets, and supersonic fighter jets to the Liaoning aircraft carrier, the "Blue Whale I" rig, and the Hong Kong-Zhuhai-Macao Bridge. Ansteel Group well deserves the reputation of the "Eldest Son of the Steel Industry of the Republic".

With the accelerated development of new industries and new forms of trade, Ansteel Group now has become a large-scale steel enterprise group covering businesses of steel, mining, vanadium and titanium, financial trade, engineering technology, chemicals, integrated industry, information and logistics energy. We followed the adjustment ideas of stable development of iron & steel industry, prioritized development of non-steel industry, and coordinated development of resource industry and accelerated the transformation from "mono steel industry" to "multi-dimensional development".

Ansteel Mining Company Limited (Ansteel Mining)'s open pit to underground mining transition project at Yanqianshan Iron Mine has an annual ore output of 8 million tons and a service life of 29 years. It is one of the largest iron mines that went through the open pit to underground mining transition in the China and the first and only underground iron mine in Anshan. The main excavation work of the project has been basically completed. The project has two maim wells and the 2# main well has been put into operation, producing 3 million tons of ore in 2018 and generating RMB 250 million annual sales income. The project is expected to be completed by the end of 2020. Once the deep underground construction is completed and put into operation, the company will become the largest underground iron mine enterprise in China.

- Jwell IoT won the titles of "Ministry of Industry and Information Technology Service Manufacturing Enterprise" and "National Development and Reform Commission Sharing Economy Model Platform".
- Yunnan Dahai Logistics Park started operation and began to make profit, Delin Land Port Company won the title of the "Top 10 China Smart LogisticsInnovative Enterprises".
- Pansteel Engineering Consulting Co., Ltd. obtained the comprehensive qualification
 of national engineering supervision, the fourth in the metallurgical industry and
 the first enterprise in Panzhihua and Xichang to receive this qualification.



- The external market revenue of Ansteel Group Engineering Technology Development Co., Ltd. and Zhongyuan Company accounted for 52% and 62% respectively.
- Ansteel Capital Holding Co., Ltd. and Financial Company continued to expand their financial services in the industrial chain, further deepening the integration of industry and finance.
- Angang Group International Trade Corporation transformed its business models through export products rebate rate
 adjustment, buyout export, social trade, and the participation in the Belt and Road Initiative.

Adopting a Global Vision of Marketing Services

We lacked initiative in the era of the planned economy and started to shift our focus outward in the era of market economy. Today, thanks to our global vision, Ansteel Group has actively strengthened its alignment with advanced concepts at home and abroad, promoted its complementarity with the global industrial resources, and continuously integrated into the global steel industry chain. Our marketing service network covers all over the world and our products are sold in more than 60 countries and regions. We have 26 subsidiaries and organizations overseas, and more than 500 domestic and foreign customers and partners.

Main International Bid Winning Projects of Angang Group



Steel for shipbuilding and marine engineering:

As the first supplier of "steel plate + sectional bar" with freight services in China, Ansteel Group has supported the FPSO project in Brazil with customized products. Ansteel Group supplied 45,000 tons of marine steel and 5,600 tons of flat-bulb steel for this project. More than 85% of the marine steel being used was high-strength steel, of which 700 tons were super-strength marine steel.



Steel for bridges:

We become the exclusive supplier of the German Rhine Bridge and the first cross-border bridge between China and Russia - Heilongjiang Highway Bridge. We provide hot-rolled steel channel to the Padma Bridge in Bangladesh. We also exclusively won the bid to supply all the 4,000 tons of bridge steel for the Slussen Bridge in Sweden in 2018, covering a full range of high-grade products from S355 to S690 and from 5mm to 100mm steel. It was the first time that Ansteel Group's steel for bridge entered the Swedish market.



Steel for railway vehicles and rails:

We were the exclusive supplier of railway vehicle steel for the Nigerian Lagos-Ibadan Railway. Our first R260 heavy rail steel was used to build the "East Economic Corridor" of Thailand. We also developed a new type of thin and high strength railway container steel for China Railway Express.



Pipeline Steel:

Ansteel Group's pipeline steel entered the Saudi market and was supplied in bulk for the Saudi Aramco's gas transmission pipeline project. We won the bid to provide spiral steel pipe for the China-Russia East-Route Natural Gas Pipeline project (Heihe-Changling Section).

About Us

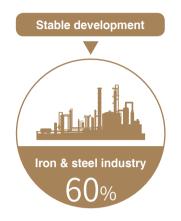
----Manufacturing Better Material for Creating a Better Life

Company Profile

Ansteel Group Corporation Limited

Ansteel Group Corporation Limited was restructured from Anshan Iron and Steel Group Company and Panzhihua Iron and Steel Company Limited in May 2010. Headquartered in Anshan, Liaoning Province, Ansteel Group is a state-owned enterprise (SOE) administered by the SASAC. Ansteel Group has formed a cross-regional, multi-base and internationalized operation layout. In 2018, Ansteel Group's brand value reached RMB 63.528 billion, ranking 428th in the Fortune Global 500 list. As an applied participant, Ansteel Group won the first prize and the second prize of National Science and Technology Progress Award. We obtained 1,702 patents, bringing the total number of valid patents to 7,880, including 3,757 invention patents. Ansteel Group now has 113,595 employees, and is striving to build itself into a world-class enterprise with global competitiveness and a pioneer of high-quality development in China's steel industry.









The "631" industrial development layout

Anshan Iron and Steel Group Co., Ltd.

Established in 1948, Anshan Iron and Steel Group Co., Ltd. was the first large-scale iron and steel integrated enterprise and the earliest steel production facility established after the foundation of the People's Republic of China. Therefore, it was known as the "Eldest Son of the Steel Industry of the Republic" and the "cradle of China's steel industry". It is an important production base for automotive steel, ship and marine engineering steel, home appliance steel, nuclear power steel and railway steel.

Pansteel Group Co., Ltd.

Pansteel is the world's largest vanadium producer, China's largest production facility for titanium raw materials, with the full industrial chain. It is the national largest, global leading heavy railway production base and an important production base for automotive steel, home appliance steel and special military steel.

Corporate Governance

In 2018, building on the comprehensive company system reform, Ansteel Group further improved the corporate governance structure and established a sound modern enterprise system. We incorporated the Party building into the corporate governance and ensured the Secretary of Party Committee and Chairman shoulder the responsibilities, giving full play to the core political role and leadership role of the Party Committee in corporate governance and making sure that major decisions are pre-examined by the Standing Committee of the Party Committee. We improved the institutional system with the Group's articles of association as the core, standardized the decision-making procedures of the Board of Directors and strengthened the implementation of the resolutions of the Board of Directors by the management, further promoting the standardized building of the Board of Directors to achieve standardized and effective operation of the Board of Directors.

In 2018, we held 26 (expanding) meetings of the Standing Committee of the Party, 5 meetings of the Board of Directors, 7 meetings of the special committees of the Board of Directors and 3 meetings of General Managers.



Board of Directors (Up to December 31, 2018)



Yao Lin Chairman of the Board



























Wang Yidong
Standing Committee Member
of the Party Committee,
Vice President





Shao Anlin
Standing Committee
Member of the Party
Committee, Vice President

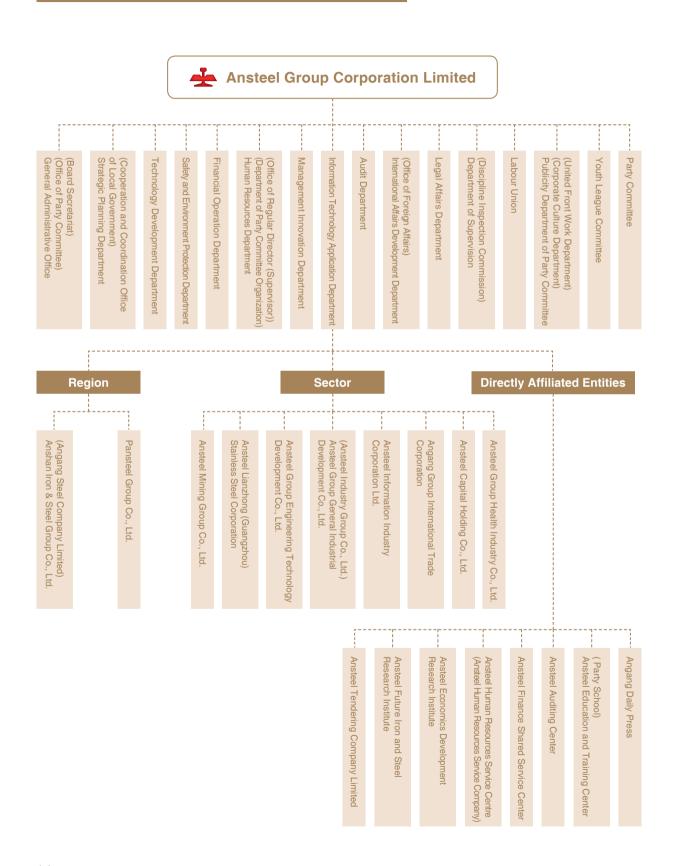


Duan Xiangdong
Standing Committee
Member of the Party
Committee, Vice President



Meng Qingyang
Standing Committee Member of the Party Committee, Secretary of Discipline Inspection Commission

Organizational Structure (Up to December 31, 2018)



Corporate Strategy

As socialism with Chinese characteristics has entered a new era, China's economy has been transitioning from a phase of rapid growth to a stage of high-quality development. The steel industry has accelerated the transition of its pursuit from quantity and scale to optimized structure and improved quality in order to continuously meet the people's growing needs for a better life. The principal contradiction facing Ansteel Group has evolved. What we now face is the contradiction between the new requirements for high-quality economic and social development and the need for speeding up our transformation and upgrading. This is the basis for us to be aware of the situation and tasks so as to map out the blueprint for future development.

The new era has brought new requirements for the historical mission of Ansteel Group. In this new era, we must stay true to our original aspiration of "remembering the responsibility of the eldest son and dedicating ourselves to serving the country", firmly fulfill the mission of "Producing better material Creating more wonderful life", and keep forging ahead.

Guidance for development

Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we comprehensively implement the guiding principles of the 19th CPC National Congress and the requirements of the "Three Advances", and undertake the "Three Major Strategies", the "13th Five-Year Plan" and the 13th Five-Year Plan for central SOEs. Guided by the "New Development Vision", in accordance with the four-pronged comprehensive strategy, we strengthen the Party's leadership over SOEs, stay market-oriented and problem-oriented, promote supply-side structural reform, strengthen technological innovation, and actively cultivate strategic emerging industries. Focusing on the core goal of enhancing enterprise value creation ability and comprehensive competitiveness, we also accelerate the transformation to quality, efficient and profitable development mode and strive to achieve high-quality development so as to build the Group into a world-class enterprise with global competitiveness.

Development strategy



We will realize transformation and upgrading to become stronger and better, embark on a new journey of revitalization and development, and enter a new stage of high-quality development.



We will strengthen the Party leadership, implement the new vision for development, and coordinate and promote the integrated work of reform, innovation, quality upgrading, intelligent manufacturing and green development. Taking supply-side structural reform as the main line, we will step up our move towards the medium and high-end industrial value chain, promote the industrial reform of quality supply, development driver and efficiency, and gradually achieve high-quality development.



We aim to achieve the goal of industrial restructuring, continue to make profits, win the battle of transformation and upgrading, and build a dynamic, promising and sustainable steel group by 2020, so as to make new contributions to the building of a moderately prosperous society in all respects.

Corporate Culture

Corporate culture is an important part of the core competitiveness of an enterprise. We thoroughly implement the cultural power strategy by establishing Ansteel Group's cultural system, setting the sacred mission of the Group, and establishing the core values, cultural heritage, management rules and norms of conduct for all Ansteel employees to keep the long-term adherence. We are committed to building a consensus among employees, enhancing the cultural confidence of the Group and promoting the revitalization of Ansteel Group.

Vision: To be an iron and steel group corporation with the most international influence
 ✓ Mission: Producing better materials, creating wonderful life

-> Core values: Innovation, Practicality, Striving, Devotion

Cultural inheritance: The spirit of "Ansteel Constitution", the glorious tradition of Ansteel Group

Management philosophy: Staff first, market orientation, continuous reform, legal compliance, refinedness and rigidity, highly efficient execution

→ Behavioral rules: Compliance, Devotion, Goodness, Civilization

➤ Corporate image: A leading, global renowned brand

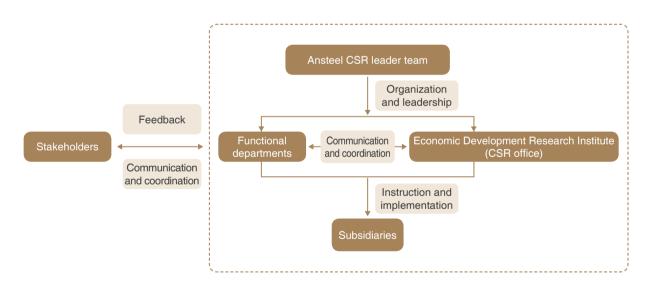
Sustainable Development Management

Ansteel Group pursues the harmonious development of its business development, society and the environment, and integrates sustainable development into the business operation of the Group to promote employees' awareness of sustainable development. Focusing on sustainability topics, we continue to communicate and work with stakeholders to promote the sustainable development of the steel industry.

Management System

We have strengthened the corporation social responsibility (CSR) and sustainability organization system and management functions, and built an index system with strategic management, business performance, technological innovation, resource and environment, employee protection and social development as the core. We have established a management and control mechanism covering the system, process, operation and assessment which has laid a foundation for further promoting CSR and sustainability management.

Since 2013, we have established a CSR organization system covering the headquarters as well as subsidiaries and ranging from management to execution that systematically sorts out work processes, improves the management organization system, clarifies leadership responsibilities and centralized management departments, and clearly defines job responsibilities and tasks, so as to realize scientific, systematic and standardized CSR management.



Organization for Social Responsibility and Sustainable Development

CSR Promotion

In 2018, we compiled the Sustainability Report and as well as the CSR Assessment Report to analyze the CSR development trend, benchmark the excellent CSR management practices, and understand how to better fulfill CSR. The CSR Assessment Report provided recommendations for the promotion of CSR work, and allowed the Group to clearly identify CSR topics, strengthen CSR communication and guarantee efforts for better CSR fulfillment.

Our team participated in the first China Symposium on Sustainable Steelmaking Technology (CSST) to promote the exchange between Chinese steelmaking technicians and foreign counterparts, and learn from the advanced technology and experience of foreign industry peers. At the 11th International Conference on CSR Reporting in China, Ansteel Group's 2017 Sustainability Report won the "GoldenBee Excellent CSR Report 2018-Leading Enterprise" award.

CSR Communication

Corporate Open Day

We attach great importance to the Corporate Open Day, and have formed distinctive open lines including the Ansteel Museum, Mengtai Memorial Hall, Lei Feng Memorial Hall, Guo Mingyi Love Studio, as well as major production lines such as mining, smelting and steel plate rolling. The public can learn about the history and culture of Ansteel Group and what we have achieved in value creation, technological innovation, environmental protection, and CSR fulfillment.

Case

Ansteel Museum labeled the National Second Class Museum

Ansteel Museum is a key base of the Group to open to the outside world. In order to help the stakeholders know more about Ansteel Group, Ansteel Museum launched the "Brand Ansteel" large-scale basic exhibition events, using a variety of carriers such as pictures, characters, videos, objects, models and interactive activities to fully demonstrate the glorious history and achievements we have made in the past 70 years, which has enhanced our brand image.

On September 18, 2018, Ansteel Museum became a National Second Class Museum.





"Brand Ansteel" Exhibition

Cas

"SOE Open Day" - get to know Ansteel

On August 10, 2018, we hosted the "SOE Open Day" Promotion Conference • Ansteel Public Open Day sponsored by the SASAC. A total of more than 100 visitors including officials from relevant departments of the Central Civilization Office, representatives of central SOEs, representatives from various sectors in Anshan City and journalists, visited Ansteel Museum and the plants of Iron-making Factory of Angang Steel Company Limited, getting to know Ansteel Group in person.





All-round Promotion

Through various media, platforms such as Ansteel Daily, Ansteel Information, Ansteel website, Ansteel Weibo, Ansteel WeChat account – Cradle Ansteel, Ansteel Museum and online museum, as well as meetings organized by the government, universities, colleges and industrial associations, we have disseminated the culture system and outstanding CSR management practices of Ansteel Group to government officials, experts and the public, building up a good responsible corporate image at home and abroad.

Case

China Steel Industry Celebration of the 40th Anniversary of China's Reform and Opening-up Summit Forum held in Ansteel Group

The year 2018 marked the 40th anniversary of China's reform and opening-up and the 70th anniversary of the founding of Ansteel Group. In order to implement the guiding principles proposed in the important speech delivered by General Secretary Xi Jinping in the celebration of the 40th anniversary of China's reform and opening-up, review the glory days of China's steel industry and contribute to the development of the steel industry in the new era, Ansteel Group and China Metallurgical Newspaper jointly organized the "New Era • New Start for Reform and opening-up-China Steel Industry Celebration of the 40th Anniversary of China's Reform and



opening-up Summit Forum", reviewing the achievements and experience of the 40 years of reform and opening-up. Through exchange of ideas, we have further broadened our vision, gained inspirations, and reached consensus, contributing to the high quality development of China's steel industry.

Stakeholder Engagement

Stakeholders	Expectations and Requirements	Means of Communication	Our Response
Governments	Promote employment Pay taxes according to law Compliance management Promote local economic development	High level meetings Meet of exchange Information submission Attend meetings Consultation and full- time Liaison organization between the corporation and the local government	 Provide jobs Pay taxes Operate according to laws and regulations Promote the development of local related industries Improve local infrastructure
SASAC, Shareholders	Maintain and increase the value of assets Improve the profitability of the enterprise Improve the rate of return of investment projects Safe production	Special report Information submission Shareholders' Meeting Management performance assessment Company announcement	Deepen reform Reduce costs and increase profits Informatization construction Improve technological innovation capability Protect shareholders' equity Strengthen safe production management
Employees	Salary and welfare guarantee Democratic management Common development Humanistic care Occupational health	Workers' congress Disclosure of corporate affairs Complaint mailbox Rationalization proposal Symposium Communication through the internet	 Provide competitive salaries Establish career development path Offer training and education Care for the employees Provide protective instrument and infrastructure
Customers	Abide by commitments Provide good-quality products and services at a reasonable price Improve capability for customized services Open communication channels	 Daily contact with sales representatives Exhibition Client meeting Regular visits Opinion solicitation 	Pay attention to customer needs Improve the quality of products and services Provide high-quality customized services
Environment	Save energy and reduce emissions Conserve resources Cope with climate change Protect ecological environment	Manage environment Make rational use of resources Implement energy-saving and emission- reduction Strengthen ecological construction	Conduct energy and water resources management Make rational use of solid wastes, surplus heat and clean energies Build ecological mines Plant trees and vegetation in the enterprise Practice green office
Suppliers	 Fair & equitable Honest & faithful Information confidentiality Policy stability Mutual benefit and win-win 	Site visitContract negotiationRegular visitsTendering conferenceOpinion solicitation	 Conduct sunshine procurement Consultation on the basis of equality Abide by contracts Disclose procurement information Conduct compliance procurement
Associations	Fair competition Industry development and progress	Join in associations and take on dutiesParticipate in activities organized by the associations	Participate in activities such as standard setting and industry research
Community, Media and the Public	Improve community environment Respect community culture Support public welfare undertakings Disclose corporate information in an open, transparent and timely fashion	Joint community building Joint project development Regular exchanges Convene community communication meeting Press release Media communication	Participate in community building Support culture and education Undertake volunteer action Disclose information

Progress in implementing the 2030 Agenda for Sustainable Development

SDGs		Process
1 Sun Britist	SDG1 End poverty in all its forms everywhere	In 2018, we supported the poverty alleviation 18 targeted regions. We carried out 106 poverty alleviation projects with a total investment of RMB 27.32 million, sent 24 officials to take a temporary post to combat poverty, spent RMB 3.8 billion and RMB 5 million respectively to purchase recourses including coal and iron ore as well as agricultural and sideline products
2 200 (((SDG2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Pansteel has invested RMB 1 million in Qvjiazhuang village on the Liuguan street of Panzhou City and carried out poverty alleviation projects of Stropharia rugoso-annulata planting, shallot planting and vegetable greenhouse. The company adopted the mode of company management + cooperative+ farmer (shareholder), which combined "basic income + bonus" and provided stable income for the poor. In 2018, 2 companies were introduced to plant more than 50 mu of cash crops, lifting 29 poor households out of poverty
3 MINISTERS	SDG3 Ensure healthy lives and promote well-being for all at all ages	Ansteel Group Hospital sent 9 medical experts in 3 batches to the People's Hospital of Taxkorgan Tajik Autonomous County, who provided professional medical services for the public and helped improve local medical care and management. In 2018, we trained 19 medical workers and helped the hospital become a grade-A hospital of second class. Meanwhile, we spent RMB 1.97 million to help 36 village clinics and 5 community health service stations in the county purchase equipment and facilities, so that the villagers could access better medical treatment
4 month	SDG4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Pansteel invested RMB 994,400 to set up the "Pansteel Dream Scholarship", covering the tuition and living expenses for students from poor families in Sichuan Electromechanical Institute of Vocation and Technology. In 2018, the scholarship benefited 688 students from registered poor households
5 IIII.	SDG5 Achieve gender equality and empower all women and girls	Abide by the relevant laws and regulations and the employment policy of equality and non-discrimination and care for the female, organize cultural activities to balance work and life of staff
6 days water	SDG6 Ensure availability and sustainable management of water and sanitation for all	Carry out environmental protection business including solid waste treatment, garbage disposal and water treatment with 34 energy-saving companies and 8 clean-energy companies
8	SDG8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Pay attention to the career development of employees and provide all kinds of practical opportunities through employee training and talent pool to broaden the development channels

	SDGs	Process
9 MONTH MANAGEMENT	SDG9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation ecosystems, sustainably manage forests, combat desertification, and halt and reverse	Focus on assembly building for the development of the new technology to develop beautiful countries, intelligent cities, sponge cities, utility tunnels
10 Minutes	SDG10 Reduce inequality within and among countries	Assist overseas communities in the sustainable development and the improvement of the local living standards through community investment and public welfare
11 PERMANENTE	SDG11 Make cities and human settlements inclusive, safe, resilient and sustainable	Anshan Iron and Steel invested more than RMB 1.7 million to help build a flood-protection bridge in Shihuiyao town of Xiuyan county, which completely improved local bridges' ability to resist flood, and ensured the safety of 840 villagers of 4 resident groups
12 ESPAGNI COSATION ACT POSICION	SDG12 Ensure sustainable consumption and production patterns	In 2018, we remained good performance in major energy-saving and emission-reduction indicators, fully accomplished the fifth-term evaluation indicators made by the SASAC and no environmental pollution incidents occurred. Jwell is a third-party trading platform for recycling materials, set up by Pansteel Jwell IoT Company. Jwell promotes the recycles of all waste and outdated materials such as waste or substandard cold-rolled and hot-rolled materials, waste chemical materials and rubber, as well as outdated electrical and mechanical equipment. Jwell accelerates the delivery of used or waste materials in Panzhihua, promotes communication with customers, and provides one-stop solution to waste materials for our users.
13 Eren	SDG13 Take urgent action to combat climate change and its impacts	Strengthen the energy-saving management and the emission reduction to fulfill the assessment missions of SASAC in an all-round way with non-pollution events for years and system construction of green standards
15 IR.	SDG15 Protect, restore and promote sustainable use of terrestrial	Ansteel Mining vigorously promotes a new mode of environmental protection and ecological reclamation to realize "mines with good ecological environment, production process benefiting the environment, and recycling of solid waste". The company was rewarded as "Advanced Green Metallurgical Mine Company in China", the multi-purpose ecological park of the large rocking dumping yard was selected as a "National Green Mine Demonstration Base". Since 2000, the company has invested a total of RMB 497 million, and planted 6 million arbors, 12.7 million shrubs, and 600,000 square meters of lawns. The ecological restoration area reached over 22.28 million square meters, 90% of which can be reclaimed
16 PLACE ARTHUR RECOVERED	SDG16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Carry out the democratic management system with the basic form of the people's Congress and the open system of factory affairs to further open up the channels of democratic management, supervision and decision-making of staff and workers



Ansteel Group would not have achieved so much without innovation, which is core force that drives the Group forward and the key to maintaining the vitality of the Group despite market turbulences. On the way to high-quality development, we always put science and technology innovation at the core of our overall development. Aiming at polishing the Ansteel brand, we keep up with the development trend of steel technologies from product to technology and from manufacturing to service, and give full play to the innovation-driven development strategy to foster new growth drivers through innovation.

Won 1 first prize and 1 second prize of the National Science and Technology Progress Award

Won ${\bf 1}$ first prize, ${\bf 4}$ second prizes and ${\bf 5}$ third prizes of Metallurgical Science and Technology

Obtained 1,702 patents, including 1,087 invention patents

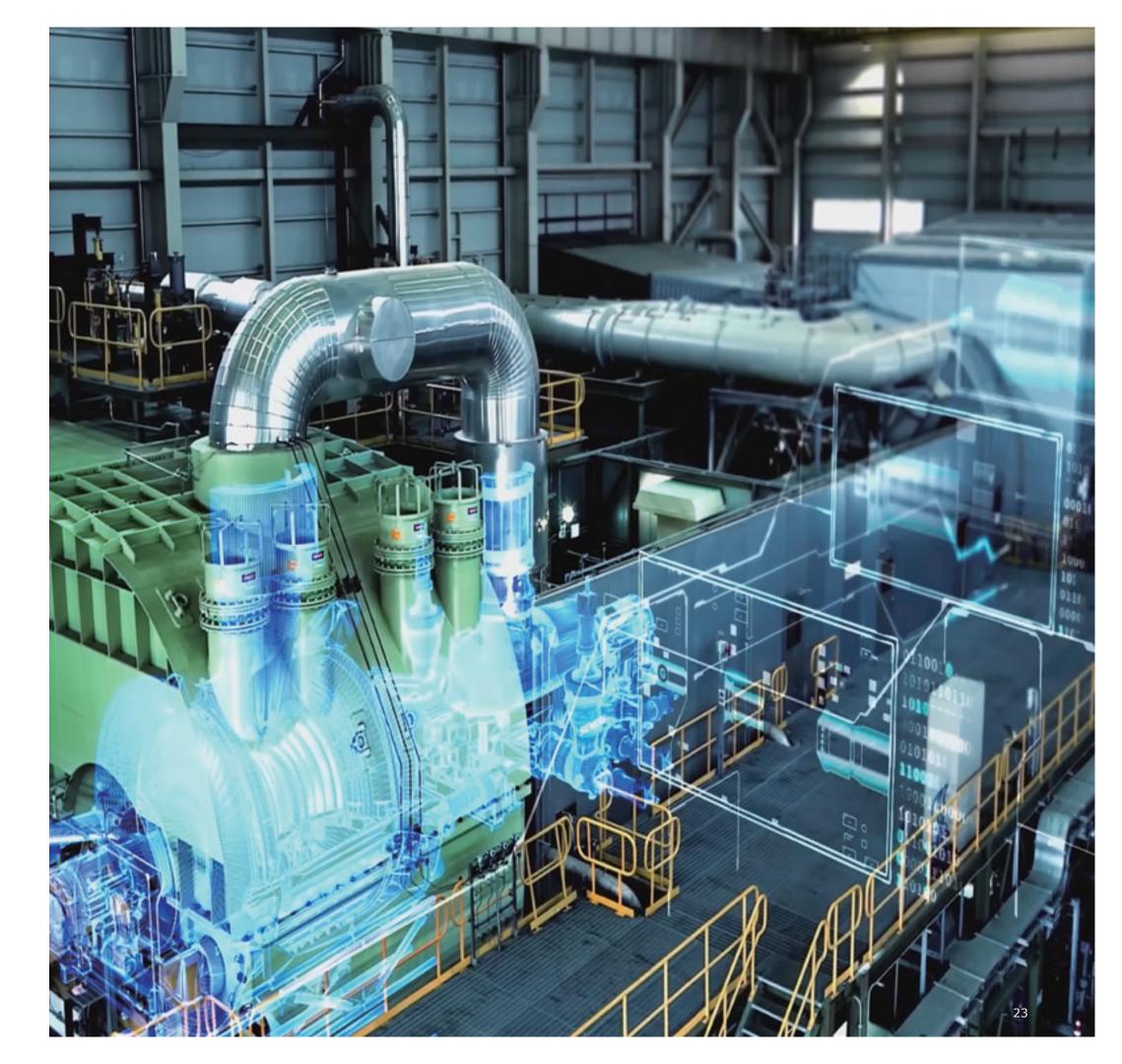
Led the formulation/revision of ${\bf 92}$ international standards, national standards and industry standards

141 are national or provincial level leading experts

The number of Ansteel Group's staff innovation studios at the factory level or higher had reached ${\color{red}205}$

The Jwell IoT CIII Industrial E-Commerce Service Platform was rated as a pilot demonstration of the **national manufacturing and Internet integrated development**

The Thick Steel Plate Intelligent Manufacturing Pilot Demonstration project was awarded the National Intelligent Manufacturing Pilot Demonstration





Being a Promoter of Intelligent Manufacturing in the "Era of Cloud"

In the new era of rapid technological development, we are using a new generation of information technology and actively responding to and implementing the *Steel Industry Adjustment and Upgrading Plan (2016-2020)* formulated by the Ministry of Industry and Information Technology. We have released the *Intelligent Ansteel Group Development Plan*, which mapped out the path of intelligent management and production. The IT application standards and master data management system was built to accelerate the integration of IT application in steel manufacturing, digital steel manufacturing and manufacturing technologies in order to create an intelligent Ansteel Group and build a national benchmark and industry demonstration enterprise. We have expanded information-based overseas business by independently completing the information construction of Karara Mining Limited in Australia, realizing overseas operation and maintenance.

Establishing the Ansteel Data Center to Provide IT Support for Intelligent Manufacturing

In May 2018, the Ansteel Data Center was officially put into operation, marking the Group's entry into the "cloud era". As the core data and network center in Anshan, Ansteel Data Center can provide high-performance, high-availability, high-scalability and high-security hardware architecture, software platform and technical support for Ansteel Group and its subsidiaries, as well as all-round IT support for intelligent manufacturing, data mining, and decision-making. The Center also offers a full range of multi-dimensional services such as cloud computing, Internet of Things, big data services, intelligent manufacturing, smart city, artificial intelligence, etc. to customers around the world.



Building the "Steel Cloud" Platform to Transform from a Manufacturer into a Service-oriented Enterprise

In November 2018, Ansteel Group worked with Kingsoft Cloud to build the "Steel Cloud", a cloud platform for intelligent manufacturing of the steel industry. With the "Cloud + Big Data + Artificial Intelligence" technology, the platform helps reduce production costs and has greatly improved productivity.

Taking the "Steel Cloud" as a vehicle for technological transformation, Ansteel Group has transformed its industrial manufacturing and digital transformation capabilities into service capabilities to export operational services. With the cloud platform for intelligent industrial manufacturing, we have promoted the construction of intelligent plants and realized connection between internal applications and equipment, business communication between upstream and downstream enterprises in the supply chain, and the ecological connectivity between industrial clusters across the supply chain and industries, contributing to the development of more industries and steering a wave of innovation.

Expanding the Intelligent Manufacturing Blueprint Supported by Alibaba Cloud

Jwell IoT is committed to integrating new technologies such as big data, artificial intelligence, blockchain, Internet of Things(IoT), and industrial Internet to form a standardized service platform and products to provide best customer services. In terms of the Internet + advanced manufacturing, and the integration of the industrialization and informatization, Jwell IoT has accumulated

rich operational experience. In 2018, the Jwell IoT CIII Industrial E-Commerce Service Platform was rated as a pilot demonstration of the national manufacturing and Internet integrated development.

In May 2018, Pansteel, Alibaba Cloud and Jwell IoT signed a cooperation agreement to introduce the ET industrial brain with Pansteel as the pilot site, Alibaba Cloud as the technical carrier and Jwell IoT as the platform. The three parties will carry out comprehensive and in-depth cooperation on the optimization of production process, product surface defect identification, equipment intelligent maintenance, factory and production line visualization, intelligent security and other steel intelligent manufacturing areas, upgrading the quality and efficiency of the traditional industry supported by data.



Pansteel, Alibaba Cloud and Jwell IoT sign the cooperation agreement

Intelligent Manufacturing Breaks New Grounds for the Steel Industry

Bayuquan Steel Subsidiary has launched the Thick Steel Plate Intelligent Manufacturing Pilot Demonstration project. With the development and application of digital and intelligent technologies in the whole process and the implementation of the infrastructure construction, network construction and intelligent expert diagnosis system, the subsidiary strives to develop six expert analysis systems including the green manufacturing, intelligent inspection and whole-process quality management from steel-making, continuous-casting to forming the plate, as well as key technology clusters of thick steel plate intelligent manufacturing. The aim is to establish an internationally advanced pilot production line for thick steel plate intelligent manufacturing characterized by in-depth information sensitivity, intelligence-optimized decision-making and precisely-controlled execution. In 2018, the Thick Steel Plate Intelligent Manufacturing Pilot Demonstration project was awarded the National Intelligent Manufacturing Pilot Demonstration project and artificial intelligence application pilot demonstration project for medium and thick plate production.

Dalian Huayelian Automation Co. Ltd under Ansteel Information Industry Corporation Ltd. cooperated with the cold rolling plant of Angang Steel Company Limited and other partners to jointly develop the first integrated coding and labeling robot in China's steel industry. When put into use, the robot will improve work efficiency, eliminate human operation errors, reduce environmental pollution, and increase operational safety.

Integrating Online and Offline Resources to Build the Intelligent Logistics Service System

As a high-level integration of logistics and technology, intelligent logistics represents the trend of the times. Delin Land Port Company is a modern logistics company controlled by Anshan Iron and Steel and an Internet-based logistics enterprise featuring deep integration of online and offline resources and open cooperation. With strong cargo organization and vehicle integration capabilities, a relatively complete logistics information platform and the information interaction and data processing capabilities that meet business needs, the company's car-free carrier platform was among the first 283 pilot units of the Ministry of Communications in December 2016, realizing the full-process service of online payment, online ordering, cargo transportation tracking, and online payment settlement. At the 2018 China Intelligent Logistics Innovation Partner Conference hosted by the China Federation of Logistics & Purchasing Intelligent Logistics Branch, Delin Land Port Company was awarded the "2018 China Intelligent Logistics Top Ten Innovation Leading Enterprises".



Enhancing Independent Innovation Capacity

In 2018, Ansteel Group accelerated the pace of open innovation, built an open technology innovation carrier and platform, leveraged internal and external high-end R&D resources to establish two strategic consulting expert committees for national major projects and the highend demand of downstream customers, and prepared for the construction of Academia Sinica.

The Group's total science and technology input accounted for more than 4% of the main business sales revenue throughout the year. A special R&D fund has been set up to fully ensure the investment in R&D projects, key laboratories and pilot lines. Ansteel Group is the only steel company in China with 2 national key laboratories, with the R&D capability ranking in the forefront of the domestic steel industry. In 2018, the Group's "three new" technology innovation created RMB 4.1 billion of profits.



Intelligent patrol robot "induction"

Case

Ansteel Group's first Beijing academician and expert work station established

On May 29, 2018, the academician and expert workstation of Ansteel Future Iron and Steel Research Institute was awarded by the Beijing Association for Science and Technology. This is Ansteel Group's first academician and expert workstation in Beijing, which is conducive to enhance the ability of Ansteel Future Iron and Steel Research Institute to undertake national key R&D tasks and elevate the Group's status in the national science and technology innovation system. The workstation is of far-reaching significance to promoting the innovation synergy between industry, universities and research. Ansteel Group has several academician and expert workstations, such as the workstations of Ansteel Mining Machinery Manufacturing Co., Ltd., Ansteel Group Hospital and Pansteel.



We value the cultivation of innovative talents. By building a "one institute for one factory" collaborative R&D model and adopting the "annual income + options" salary incentives for R&D personnel, we have optimized talent promotion and evaluation mechanisms and attracted mature high-end technical talents in a targeted manner so as to create a technical talent echelon. Having completed the appointment of chief experts, researcher and other R&D personnel, Ansteel Group now has 564 R&D personnel and 1,060 high-skilled talents, among which 141 are national or provincial level leading experts.

Case

Setting Up the Youth Innovation Special Support Fund

Ansteel Group Research Institute has set up the first youth innovation special support fund and adopted the "talent + project" and "mentor + team" talent training model to promote the innovative thinking of young researchers and cultivate their ability to conduct independent research projects, preparing talents for the Group's innovation development.



Hydrogen Production Project VI achieves its stated objectives



The coking production has the "smart housekeeper"



Carry out special measures to improve product quality



Remaining Rooted in the Innovative Cultural Gene

Independent innovation of employees is the inexhaustible force driving corporate development. We give ample amount of attention to the pioneering spirit of employees and create conditions for staff innovation studios through the introduction of staff innovation studio management methods, provision of innovation support funds, support for rapid project approval, and regular results release and recognition. At the same time, we provide rich activities, making full use of the exchange platform of staff innovation studio salon, blue collar maker space, etc., to encourage the communication between front-line employees who are committed to innovation inspire them.

By the end of 2018, the number of Ansteel Group's staff innovation studios at the factory level or higher had reached 205. Anshan Iron and Steel Railway Transport Subsidiary Malong Innovation Studio, Ansteel Mining Yang Fubin Innovation Studio and Zhang Zhongwei Innovation Studio, and Zhang Zhe Innovation Studio of the cold rolling plant of Angang Steel Company Limited won the honorary title of "2018 National Metallurgical Industry Excellent Innovation Studio". At the 5th National Excellent Workers' Technological Innovation Achievements Exchange, Ansteel Group won 3 first prizes, 15 second prizes and 18 third prizes.



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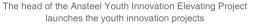
Established in 2016, Wang Liyi Innovation Studio has created RMB 35.4627 million of profits

Case

Youth Innovation Elevating activities make contributions and progress based on posts

Ansteel Group has established an integrated project management platform to facilitate a large number of Youth Innovation Elevating Activities with demonstration functions, and carried out large-scale dedication events such as the "Youth Innovation Promotes Revitalization, Innovation Boosts Development" Youth League Special Project Competition and the "Engineering Technology Youth League Special Competition". In 2018, 1,413 innovation projects were approved. The year 2017 saw 50 youth innovation elevating medal projects. The Youth League Special Projects produced RMB 15 million of profits.







Young employees of Ansteel Group actively participate in the Youth Innovation Elevating Activities



The Youth League Committee of Ansteel Group launches the young innovators award ceremony

Gaining Technological Innovation Achievements

With the goal of "becoming a leader of high-end products", we have stepped up the R&D of core technologies of main products. We have produced first-class products such as heavy railway, automotive steel, marine steel, bridge steel, vanadium and titanium products, and military metal materials, enabling the Group to enter a "high-end circle" characterized by constantly improved product structure and industrial competitiveness.

In 2018, the projects submitted by Ansteel Group as a participating unit won 1 first prize and 1 second prize of the National Science and Technology Progress Award and 1 first prize, 4 second prizes and 5 third prizes of Metallurgical Science and Technology. 8 projects were newly approved to be national projects and 9 existing national projects hit phased targets.

We attach great importance to the creation, application, protection and management of intellectual property rights. Ansteel Group has obtained 1,702 patents, including 1,087 invention patents. We have a total of 7,880 valid patents, among which 3,757 are invention patents and 174 are proprietary technologies. The innovative project *A Coal-rock Blending Method Based on the Vitrinite Group Reflectivity of Coking Coal* of Ansteel Group won the 20th China Patent Excellence Award.

Case

The world's first laboratory single-winding spiral electromagnetic stirring device invented

Ansteel Group invented the world's first laboratory single-winding spiral electromagnetic stirring device to provide technical support for the quality improvement of cast slabs and the development of new steel grades, laying a solid foundation for the industrial application of spiral electromagnetic stirring. Compared with the traditional electromagnetic stirrer, the newly developed one by Ansteel Group can make the molten steel mixed more evenly, effectively reduce the density segregation and improve the quality of the cast slab.

Strengthening Industrial Science and Technology Cooperation

We have overcome technical difficulties and formulated a number of technical standards to boost the development of China's steel industry. In 2018, we led the formulation/revision of 92 international standards, national standards and industry standards, and was awarded by SAC/TC 183. We advocate openness and leverage the scientific research strengths and resources of universities and research institutes to enhance mutual cooperation. In 2018, Ansteel Group signed 81 external technical contracts.

Cooperation with Universities

We have established a joint laboratory of metal materials welding technology and a joint laboratory of aerospace and metal materials with Harbin Institute of Technology, and the Ansteel & Northeastern University Advanced Materials Engineering Research Institute with Northeastern University.

Cooperation with Research Institutes

We have set up a joint laboratory of automotive materials connection technology with Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences and the Nuclear Power Plate R&D Center with Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Technological Exchange

We have invited well-known experts and scholars at home and abroad to hold 14 academic conferences, organized scientific research personnel to participate in 11 international academic conferences, and conducted technological exchanges and mutual visits with University of Science and Technology Beijing, Shanghai University, Nanjing Tech University, Institute of Metal Research of Chinese Academy of Sciences, China Iron & Steel Research Institute Group, University of Science and Technology Liaoning to enhance the academic research ability of technical personnel.





High-quality development is essential to realizing the Chinese Dream of national rejuvenation. Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, Ansteel Group makes sure that the Group is moving in the right direction. We are committed to deepening reform, strengthening corporate governance and risk management and control, and fully stimulating the vitality and motivation of the Group, working tirelessly to become a world-class enterprise with international competitiveness.

Ranked **428**th among the 2018 Fortune Global **500**, the best ranking in history

Anshan Iron and Steel has won the title of "National Enterprise of Observing Contract and Valuing Credit" for 17 consecutive years

Signed a RMB **34** billion debt-to-equity swap cooperation agreement with financial institutions, and completed market-oriented debt-to-equity swap of RMB **17.4** billion

A profit of RMB **5.24** billion in vanadium and titanium

Realized 100% legality review for major decisions, important systems, and major economic contracts

The SASAC selected Ansteel Group as a pilot enterprise for **comprehensive reform in the Northeast region**

Ansteel Mining, Ansteel Group Engineering Technology Development Co., Ltd. and Chengdu Jwell IoT Group Co., Ltd. were included in the "SOE and Central SOE Reform Action" Work Program to select top 100 central SOE subsidiaries and top 100 local mainstay SOEs



Feature

Consolidating the "Root" and "Soul" of Ansteel Group to Steer the New Journey towards High-quality Development

Upholding Party leadership and consolidating Party building is the glorious tradition and unique strength as well as the "root" and "soul" of SOEs in China. We have upheld the Party leadership unswervingly and taken the strong leadership of the Party as our guide to ensure that corporate reform and development always follow the right political direction and provide a strong political guarantee for the high-quality development of Ansteel Group.

In 2018, Ansteel Group's reform entered the deep water zone. At a critical stage of corporate development, we must make more efforts in Party building and make it play a central role in corporate management and governance. Ansteel Group has turned Party building from a "soft task" to a "hard constraint" and truly transformed the achievements of Party building work into development strengths and competitive edges of the Group.



Strengthening Party Education

The more we forge ahead, the more we need a team of officials who are "loyal to the Party, dare to innovate, equipped with good management ability, able to bring prosperity to the Group, and honest". Ansteel Group has continuously improved the understanding of political theories of officials and employees through comprehensive and systematic political theory education.

We have innovated in and improved the learning methods of the Party Committee Center Group; strengthened Party consciousness education, and regularized and institutionalized the requirement for all Party members to have a solid understanding of the Party Constitution, Party regulations, and related major policy addresses and to meet Party standards. We have selected advanced collective and individual models, and gave play to the role of these models by promoting them through Ansteel Party Building Network, Ansteel Daily, education briefings and various media platforms. In 2018, a total of 891 group-level Party member projects were carried out, with 125,000 participants.



Special Party Lecture

Strengthening Organization Building

We have strengthened the "five basics" construction, vigorously implemented the three major quality improvement projects of the "strong foundations", "upgrading" and "demonstration and guidance" of Party branches, continued to carry out the "grassroots Party branch building and upgrading year" activity where we selected outstanding Party branch secretaries based on abilities and carried out rotating training for all employees to make comprehensive progress in grassroots Party branch building. We have continued to carry out thematic activities of Party members' projects, Party members meritorious service,

"wearing party emblems, demonstrating identity, establishing images, and making contributions", giving full play to the model role of Party members.

We have promoted innovative Party building. In January 2018, Ansteel Group Party Building Information Management Network was officially launched, covering 225 Party committees and 2,500 Party branches (general branches) of the Group. Throughout the year, the Party committees at all levels of the Group issued a total of 24,611 pieces of information, which received more than 200,000 clicks.

Strengthening Supervision and Inspection

We have deepened the reform of the discipline inspection and supervision system, improved the work system for fostering clean governance, and built a supervision system to realize all-round, full-process, and full-cover supervision. We have continued to rectify the issues found in the central disciplinary inspection, and conducted internal inspections in a solid manner. We have resolutely adopted the eight-point decision on improving Party and government conduct, proposed by the CPC Central Committee, taken tough

action against the practice of formalities for formalities' sake, bureaucratism, hedonism, and extravagance, carried out special governance in depth, and comprehensively strengthened supervision. Through supervision, we have conducted four forms of oversight over discipline compliance to clamp down corruption. Through inspections, mechanism innovation, and system development, we have been striving to foster a healthy political atmosphere of integrity without corruption.

Case

Ansteel Party Committee First Inspection Team conducts disciplinary inspections

From July to October 2018, the First Inspection Team of the Ansteel Party Committee stationed in Anshan Steel and Iron to conduct disciplinary inspections. It was the first round of regular inspections conducted by the Party Committee of the Group since the 19th CPC National Congress. It was also a self-examination before the new round of disciplinary inspections by the central government, promoting the full and rigorous governance over the Party, and providing a solid political guarantee for deepened reform and revitalization of Anshan Iron and Steel.

Regulating Intraparty Conduct

We have strictly implemented the *Code of Conduct* for Intraparty Political Life Under New Circumstances, organized democratic life meeting for Party members, officials and leading officials with high quality and standards, carried out criticism and self-criticism strictly, and adhered to the combination of collective leadership and individual division of labor. We have held regular Party members' meeting, Party branch meeting, Party group meeting and Party lectures. We have upheld and improved the democratic life meeting, organizational life meeting, consultations, Party member democratic evaluation, themed Party days and the transparent Party affairs system, etc.



Clean Governance Education Meeting

Comprehensively Deepening Reform

We have formulated the implementation opinions on deepening reforms at a new stage as the guideline for the Group to deepen reforms. At the same time, we issued the 2018 Deepening Reform Implementation Plan covering 8 aspects, 53 key reform projects and 130 reform initiatives to ensure the Group has the right direction, good methods, effective programs, and full implementation. In 2018, the SASAC selected Ansteel Group as a pilot enterprise for comprehensive reform in the Northeast region. Ansteel Mining, Ansteel Group Engineering Technology Development Co., Ltd. and Chengdu Jwell IoT Group Co., Ltd. were included in the "SOE and Central SOE Reform Action" Work Program to select top 100 central SOE subsidiaries and top 100 local mainstay SOEs.

Ansteel Group has strengthened its leading market position, conducted contractual operations, promoted contract management, deepened the reform of the three systems, and further mobilized the enthusiasm and creativity of managers at all levels. We have improved the management and control system to be more efficient and coordinated to tap the internal vitality and development momentum and enhance the market competitiveness. We have separated water supply, power supply, heating supply and property management and basically completed the reform of educational and medical institutions, creating favorable conditions for the sustainable and healthy development of the Group.

Deepening differentiated management

We have promoted the reform and development of production and operation units, adopted classified management, classified authorization, classified assessment, and classified development methods, further cultivating core business competitive edges and enhancing non-core business specialization and industrialization. We have promoted market-based institution and mechanism reforms for grassroots production and operation organizations to fully activate each micro-market entity, transform internal production into market operation, and improve the quality and efficiency of all-factor operation.

Improving market-based operation

We have fully implemented the contract management to conduct contracted operations at the three levels of the Group, production plants and production lines, and promote the transition from factory system to corporate system. We have made tailored reform plans for each subsidiary, promoting reform breakthroughs in key areas and key links. We have enhanced project contract management, and implemented simulated co-investment management for new projects such as the Pansteel industrialization demonstration project of blast furnace slag titanium recovery.

Streamlining the Group

Focused on improving the business vitality, development momentum, management efficiency and productivity, we have established and improved the differentiated management system and increased the treatment to loss-making subsidiaries to accelerate the organic integration of corporate social functions, and comprehensively promoted a streamlined Ansteel Group. By the end of 2018, 54 corporate entities that had lost their value creation ability had been eliminated, over fulfilling the targets set by the SASAC. The management level of the Group has been reduced to four levels.



Strengthening Risk Management

We have taken tough steps to forestall and defuse major risks by establishing and improving the integrated risk management and control system, building the information network platform, enhancing the awareness of risk prevention and control of all employees, and strengthening the prevention and control of financial risk as well as overseas risks. All these steps have guaranteed the high-quality development of Ansteel Group.

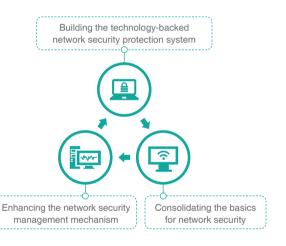
Establishing an integrated management and control system

We have formulated the *Integrated Risk Management and Control System Development Plan* that clarified the idea of the integrated system development, promoted the transition from risk management to risk management and control, and put the decisions regarding the risk control of major issues into execution. Our risk response changed from risk identification and evaluation to the whole-process risk control, comprehensively enhancing the Group's overall risk management and control capabilities. In 2018, we promoted the transformation of risk management to risk management and control, established and improved the Group's integrated risk management and control system, and planned to change risk management from "defensive type" to "value-creation type" within three years to promote the high-quality development of Ansteel Group.

Network and Information system security

We have fully implemented the national network security and grade protection requirements, improved the "basics + technology + mechanism" three-in-one network security protection system, strengthened network security management and technology-backed security protection, so as to ensure the safe and stable operation of the Group' network and information system.

We have carried out network security work in terms of basics, technologies, mechanisms, etc., to improve network security protection capability, threat perception capability, and emergency response capability, ensuring the safe and stable operation of our network and information system.









National research team visits the mining data center



Commitment to Management with Integrity

We strictly abide by laws and regulations, industry norms and company regulations, promote the rule of law and integrity within the Group, strengthen compliant and integrity management, adhere to the spirit of contract, honor contracts and keep promises, and consciously maintain market order. Anshan Iron and Steel has won the title of "National Enterprise of Observing Contract and Valuing Credit" for 17 consecutive years.

Enhancing the law-based corporate governance

We have comprehensively promoted the law-based corporate governance to provide a solid legal guarantee for the Group to start a new journey of revitalization and development.

Identifying the person of primary responsibility.

We have identified the person of primary responsibility in the law-based corporate governance of subsidiaries at all levels, carried out the assessment of the related work, and comprehensively evaluated the effectiveness in all subsidiaries.

Fulfilling the main responsibility

The law-based corporate governance requires full participation, comprehensive coverage, and full-process supervision and assessment.

Implementing the organization and promotion responsibility

The legal affairs departments of subsidiaries at all levels are responsible for organizing and promoting the responsibilities of law-based corporate governance, studying and formulating the overall planning and implementation according to varied corporate conditions, and at the same time, playing supervision, inspection and assessment roles, jointly promoting the law-based corporate governance with the business departments.

We have strengthened the knowledge promotion and assessment of the rule of law among leading officials, and enhanced the ability and performance of corporate managers to use law-based thinking and methods to deepen corporate reform, promote group development, resolve internal and external contradictions, and maintain social stability.

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Compliance with laws and regulations

"Compliance with laws and regulations" is one of the Group's management rules. We have continued to strengthen compliance management, operate in compliance with laws and regulations, and create a good atmosphere of legal compliance within the Group, which has gained recognition and trust from internal and external stakeholders.

Strengthening compliance management

We have promoted the establishment of the general legal advisory system, improved the review mechanism for major decision-making compliance. and strengthened the legality review of rules and regulations. We have set up special (part-time) legal affairs management positions that are compatible with the scale of operations and external business needs of subsidiaries at all levels, and established systems and standards for corporate compliance management to perform compliance management duties.

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Tightening compliance audit

We have strengthened risk assessment and compliance audit before major decisions are made, and realized 100% legality review for major decisions, important systems, and major economic contracts.

Compliant overseas operation

We have carry out international operations in accordance with laws, strengthened the investigation and treatment of overseas legal risks, and embedded legal risk prevention into the whole process and various links of major overseas projects to enhance our legal risk prevention capability. The Group and its subsidiaries have organized regular investigations on overseas legal compliance risks, strictly abided by the international treaties and the laws and regulations of the countries where the projects were located, and promoted the compliant operation of overseas enterprises.

Emphasizing the compliance culture

We have strengthened the Group's compliance awareness by putting the compliant management rules of the Ansteel Group Culture Charter into practice, conscientiously implementing the Group's seventh five-year plan for the rule of law publicity and education, and studying and publicizing the Constitution in an in-depth manner to enhance the law-based thinking and awareness of employees.



Fostering integrity

We have promoted the building of clean Party style and strengthened supervision and inspection of key links in key areas. Besides, we have strengthened anti-corruption awareness, anti-corruption prevention and control, and anti-corruption punishment execution, to ensure the sustainable and healthy development of the Group.

Case

Anshan Iron and Steel promotes the building of clean party style

Anshan Iron and Steel has established a sound anti-corruption system and mechanism to exercise strict governance and management over business operation and employees, comprehensively identified weak links and institutional loopholes in anti-corruption work to correct them while they are nascent and create a sound environment for clean and honest corporate operation.

Increasing integrity education

The company organizes discipline inspection and supervision at all levels, carries out Party discipline, case warnings, and targeted education for key important posts, and organizes Party members and officials to visit the Anti-corruption Education Exhibition Hall. It also conducts Party lectures for grassroots Party committee secretaries, and promotes advanced typical practices to the Ansteel Daily and other media.

Enhancing supervision, inspection and reminders

During important holidays, the company exercises excellent supervision and inspection of Party members and officials by sending reminders via SMS, WeChat, and e-mail, and also conducts reminder education, supervision and inspection, and special governance.

Critical supervision in key areas

The company organizes the Secretaries of Discipline Inspection Commissions at all levels to participate in the selection and appointment of management personnel throughout the whole process, and conducts integrity talks with newly appointed officials, middle management personnel and key post employees. It also improves the integrity documents of the officials from subordinate units, deputy directors or higher, and the important personnel at key positions.

Promoting special supervision

The company carries out special supervision in grassroots units, aiming to put forward management suggestions, and improve rules and regulations so as to establish a foundation for integrity management.

Ansteel Industry Zhongyuan Industrial Metallurgical Resources Recycling Company has actively built a relationship of "reciprocal commitment, mutual supervision, promotion of honesty, and win-win cooperation", embedded the clean Party style building and discipline inspection and supervision into business processes, and invited construction units, supervision units and equipment suppliers to participate in the signing ceremony of the Honesty and Integrity Agreement. The company also strengthens the supervision of the whole process of the project, so as to promote the building of clean Party style among the grassroots units.



High-quality products and services are what keep a company going. Ansteel Group has comprehensively built a high-quality Ansteel brand, and is constantly perfecting its products and services so as to provide customers with quality products that stand the test of the market. At the same time, we provide customers with tailored and efficient solutions that meet their needs, striving to become a steel company with significant global influence and the leader of China's steel industry.

In the third Six Sigma project competition sponsored by the Metallurgical Industry Quality Management Union, Ansteel Group ranked **first** in the competition and all **15** projects were awarded

Ansteel Group ranked **A+** in the shipboard and offshore board product quality capability (enterprise) section of the list due to excellent product quality

In 2018, the customer satisfaction was **93.21**, the overall satisfaction index of Pansteel's domestic steel products sales was **89.44**, while that of Pansteel Xichang Steel & Vanadium Co., Ltd was **89.56**

In 2018, Pansteel handled **99.69%** of product quality complaints, the comprehensive treatment rate of complaints was **97.8%**

Anshan Iron and Steel organized the formulation and revision of **9** quality procedures and **11** quality management methods,has gained more than **60** product certifications, through process improvement and innovation with an increase of profits of more than RMB **20** million

Pansteel has the quality management system covering 100% manufacturing units



Feature

Product Innovation Makes Ansteel Group the Pillar of a Great Power

Today, the world is stunned by China's mega projects, the pillars of a great power and its national identity. The ubiquitous steel elements and the "made by Ansteel" tags are the interpretation of the responsibility and pursuit of the Group as the "Eldest Son of the Steel Industry of the Republic". Ansteel Group has positioned itself to be a high-end manufacturing brand, becoming the "steel backbone" of the country.

Ship and marine engineering steel

We are the exclusive supplier of China's self-built sixth-generation deep-water semi-submersible drilling platform "Hai Yang Shi You 982", 308,000-ton VLCC "Landbridge Fortune", and China's first 20,000-box super large container ship built by domestic ship plates "Gemini". We exclusively won the bid to supply all 13,000 tons of crack arrest steel plates for nine 22,000-box container ships of China State Shipbuilding Corporation Limited. It was the first time that domestic super-strength ultra-thick crack arrest steel plates were used in the shipbuilding industry, with the world's largest product specifications. We supplied quenched and tempered marine steel in batches for the first time, becoming the first "steel plate + steel bars" whole-ship



Angang's exclusive supply of the world's largest deep-sea aquaculture vessel

supplier in China. We provided whole-ship ship steels for the world's first self-propelled immersed pipe transport-installation ship.

We have won the bid for the world's largest intelligent "marine pasture", promoting the green development of China's fish farming industry. The South China Sea "marine pasture" can withstand the maximum level 17 typhoon. To this end, we have focused on strengthening the formability of steel plates. Considering that the platform is used for long-term service deep in the sea, we have greatly improved the corrosion resistance and weldability of steel plates to ensure the safe and stable operation of the platform.



Bridge steel

We are the largest bridge steel supplier for the world-class cross-sea project – ShenZhenZhongShan Bridge; we exclusively provide all main bridge steel for the facility construction of the Beijing 2022 Winter Olympics; and we are the exclusive supplier of the highest bridge in Asia – the Pingtang Bridge. Our high-end stainless bridge composite plate is used in the world's first high-speed railway suspension bridge – Wufengshan-Yangtze River Bridge; and our products are also used in the railway bridge construction of the Zhengzhou-Jinan high-speed railway across the Yellow River.



Railway steel

We are the exclusive supplier of the first tram project in Hainan Province; we created a new type of tailor-made high-strength thin railway container steel for China Railway Express; bainitic steel rail was successfully applied to the construction of the Beijing Metro and Shanghai Metro; we have completed the trial production of 75 type U75V hot rolling rail, and the U77MnCrH and AB1 online heat treatment rail; and our hot rolled ribbed steel was successfully applied to the Weifang-Laixi high-speed railway and the Beijing-Xiongan intercity railway. We have developed steel plates for bogies with mold weld performance which was used in cloud rails (straddle monorail trains) for the first time.



Nuclear power steel

We have developed the world's first high-performance 18MND5 steel plate for the construction of the safety injection tank of the Hualong One nuclear reactor; we have successfully trialed the 316H austenitic stainless steel of the fourth-generation fast reactor project for the construction of Xiapu One main container; and we have completed the smelting and flaw detection of the nuclear power ferritic stainless steel 405.



Pipeline steel

We have successfully developed quenched and tempered acid-resistant pipeline steel, effectively broadened the market for acid-resistant pipeline steel and improved the market competitiveness of the Ansteel's pipeline steel. We have completed the production of more than 10,000 tons of ultra-thick L555M pipeline steel sheets for the first high-pressure large-diameter gas supply pipeline project in Xiong'an New Area, breaking the record of rapid delivery of pipeline steel.



Electric steel

Cold rolled silicon steel products have achieved a breakthrough in the field of power generators. The high magnetic induction oriented silicon steel has improved the decarburization process. We trial-produced the national standard 30 specification marks, opened the 23 specification process route, and the magnetic performance was the best in history.



Container steel

9Ni Steel successfully won the bid for the first domestic and the world's second low-temperature ethylene storage tanks – Panjin Bao Lai Petrochemical 100,000 cubic meters storage tank and Dalian Hengli Petrochemical 50,000 cubic meters storage tank, expanding the application of 9Ni steel.



Metal products

The 5mm-diameter limit specification cord steel wire rod was applied to BMW car; and China's longest high-strength pulsating cableway wire rope was successfully produced.



Automotive steel

Cold-rolled automotive steel was successfully tested in Changsha BYD; Fuzhou Blount SAEJS chain steel products passed the user application smoothly; hot-rolled environmentally-friendly EPS girders were steadily supplied to FAW Jiefang Qingdao Automobile Co., Ltd. in batches.



Strict Quality Management

We adhere to the core values of "innovation, practicality, striving, and devotion" to tighten quality management. We improve product quality through work quality, let the pursuit of excellence and advocate for the brand become the value guidance of employees and the spirit of the times, strengthen quality supervision and assessment, and continue to provide customers with quality products and services.

Improving the quality management system

We have established a sound quality management system, quality and safety responsibility system, quality index control system, quality index benchmark system, quality evaluation system and comprehensive quality information system to strictly ensure product quality and vigorously improve quality management.



Improving repair quality and reducing production costs



Experts of China Association For Quality provide guidance on related work in Pansteel

Improved Quality Management

Anshan Iron and Steel organized the formulation and revision of 9 quality procedures and 11 quality management methods, publicized excellent management experience for 12 times, and promoted the independent operation of 10 quality inspection stations. Pansteel has continued to implement the JLG (refine, quantitative, and implementation rigidity) management methods, the quality management system covering 100% manufacturing units, reducing quality loss and costs by RMB 26 million.

Increased Quality Certification

Anshan Iron and Steel has gained more than 60 product certifications such as automotive steel, bridge steel, new type of corrosion resistant steel, Russian GOST and Indian BIS throughout the year, which effectively helped sales channel expansion and high-end market development.

Fruitful Quality Awards

In 2018, Anshan Iron and Steel's 5 products including the high-speed railway steel won the "Golden Cup Award" for the physical quality of metallurgical products; bridge Steel won the "Special Quality Award"; 6 products including the hot-rolled container plates won the title of the "Liaoning Province Famous Brand": and cold rolling nonoriented electric steel won the title of the "Liaoning Province Key Brand". 4 teams of Pansteel were awarded the "Guoyou" QC teams, 3 national quality-trustworthy teams, 32 "provincial (industry) excellent" QC teams, and 33 provincial (industry) quality-trustworthy teams. 8 products received the "Golden Cup Award".

Case

Strengthening quality management through the Six Sigma projects

In September 2018, in the third Six Sigma project competition sponsored by the Metallurgical Industry Quality Management Union, Ansteel Group ranked first in the competition and all 15 projects were awarded. Ansteel Group has rich experience in the Sis Sigma quality management. Anshan Iron and Steel has formed a Six Sigma project, training and guidance system with its own characteristics. Pansteel has continued to promote the Lean Six Sigma quality management system among its subsidiaries and cultivated a group of new quality management talents.

Raising quality awareness

Thinking determines actions, and actions determine work quality and product quality while work quality and product quality determine the brand image. We have integrated brand strategy into our business strategy and enhanced brand awareness and reputation. The quality management philosophy of "doing things right at once" and "do not make, pass on or accept defects to ensure zero defects" has become the creed and spontaneity for employees. We have strengthened quality management training and quality training for all employees. In the "Quality Month" event in 2018, we collected 23 papers and 869 reasonable suggestions.



Steel plate quality check

2018

Anshan Iron and Steel completed the Six Sigma quality management methods trainings for **85** participants, the IATF 16949 quality training sessions for **270** participants, and the annual quality, technology and application training of the education and training center throughout the year.

Pansteel organized 4 quality management trainings at the company level throughout the year, with 360 participants. 9,320 employees participated in the Central SOE Quality Management Online Knowledge Competition.

We have promoted quality innovation, developed and applied advanced technologies and processes to improve product quality, improved development quality and efficiency, enhanced the core competitiveness of the Group, and consolidated the foundation for high quality development. In 2018, the first domestic steel product quality ranking list was released. Ansteel Group ranked A+ in the shipboard and offshore board product quality capability (enterprise) section of the list due to excellent product quality.







China's first domestic aircraft carrier launched in Dalian

Anshan Iron and Steel makes remarkable progress in quality innovation

rengthening Quality Research The company has closely tightened the control and management of key production process nodes of steelmaking, implemented our targets, responsibilities and evaluation systems, and regularly evaluated key factors such as purity, constant speed and constant temperature to improve product quality. It also continued to promote 154 company-level and plant-level research projects.

Improving Process Innovation

Through process improvement and innovation, the company has completed more than 40 projects such as process optimization, process simplification, and alloy reduction, with an increase of profits of more than RMB 20 million.

Enhancing Equipment Precision The company has continued to advance the standardized inspection and repair work to consolidate the foundation and ensure stable and efficient operation. It has implemented more than 200 functional precision projects such as the five large-scale blast furnaces overhaul and effectively carried out process rectification to improve product quality.



Improving the Service System

Providing quality service is our solemn commitment to our customers. Ansteel Group prioritizes customers and provides value-added services for users. We provide high-quality, personalized and differentiated services that meet the expectations of users and create greater benefits, so as to help customers solve problems to the greatest extent and achieve win-win development with customers.

Building the customer – supplier sharing platform

We have created a customer–supplier sharing platform to realize the whole-life cycle management and operation of the suppliers by collecting supplier information, analyzing supplier data, and sharing the results on the platform, thus providing strong support for supplier information sharing and management systems. The platform covers all the suppliers of goods, engineering, and service procurement required by our production operations and all customers in our financial sharing systems. At the same time, the platform updates the supplier information in real time and automatically verifies and marks it, which helps effectively eliminate credit risk.



Six process elements of the customer – supplier sharing platform

duties and powers standards and rules

Two basic elements of the customer – supplier sharing platform

The customer–supplier self-service system can provide customers with services such as sales inquiry, online bidding, account management, electronic warranty, contract progress inquiry, customer satisfaction survey, etc., effectively improving the service quality and efficiency and saving customers a lot of time and cost.

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ROVIDING QUALITY PRODUCTS

COOPERATING WITH PARTNERS TO BUILD A WIN-WIN ANSTEEL

STRENGTHENING ENVIRONMENTA PROTECTION TO JOINTLY BUILD A GREEN ANSTEEL

OF TALENTS TO BUILD ADYNAMIC ANSTEEL

DEVELOPMENT TO BUIL
HARMONIOUS ANSTEEL

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Improving customer satisfaction

We strengthen communication with customers through technical exchanges, symposiums, phone calls, e-mails, field visits, and online collections to track project progress, understand customer needs, and continuously improve products and services based on customer feedback to improve customer satisfaction.

Case

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Creating more values for customers

The Logistics Management Center of Angang Steel Company Limited provides high-quality services to customers. According to users' needs, the Center has jointly designed specialized and economical special containers with relevant departments for molten iron multi-model transportation, and realized the container transportation of large-tonnage steel coils of more than 10 tons. The Center has realized large-scale container sea-rail multi-model transportation in many routes such as from the headquarters of Ansteel Group to Dalian TAGAL, from Yingkou to Putian, and from Yingkou to Ningbo.

Special containers have optimized the previous container handling solution. It not only saves material, logistics and transportation costs, but also greatly improves the handling efficiency, which is the first in China. This type of container has gained China's highest level railway transportation system certification from the China Academy of Railway Sciences and relevant certifications from China Classification Society.

Pansteel has established two customer service centers for its steel products, with five regional service sub-centers responsible for the daily customer service management of Pansteel products in Chengdu, Chongqing, South China, East China and Yunnan and Guizhou, providing whole process tracking service for customers. In 2018, the overall satisfaction index of Pansteel's domestic steel products sales was 89.44, while that of Pansteel Xichang Steel & Vanadium Co., Ltd was 89.56.

Anshan Iron and Steel has set up a customer service department, and formulated the *Customer Satisfaction Measurement Procedure* to standardize customer satisfaction management by following the basic policy of "fact-based, sufficient authorization, rapid response, and customer satisfaction", making every effort to handle customer complaints. The customer satisfaction in 2018 was 93.21.



Actively responding to customer complaints

We attach great importance to customer complaints. We collect customer complaints sincerely, carry out timely investigation, make quick response, conduct coordinated analysis, and handle them in a proper way, in order to minimize customer losses, ensure customer satisfaction, and win customers' trust.

Pansteel has a standardized process to deal with customer complaints about products in a timely manner. In 2018, Pansteel handled 99.69% of product quality complaints.

Anshan Iron and Steel has increased the manpower allocation to handle the cold-rolling and coating products complaints as the products receive the most frequent complaints. The company sends technical staff to provide on-site service for key customers in key areas. At the same time, the monthly proportion of complaints closed has been included in the performance indicators to act as the constraints and incentives for complaints handling. The comprehensive treatment rate of complaints in 2018 was 97.8%.



Strengthening customer privacy protection

We respect the privacy of our customers. We have established a confidentiality system for customer information, appointed special personnel to manage customer information, and clarified the rights, job responsibilities and requirements of confidential personnel. The confidentiality agreements are signed, regular confidential education, training and examinations are held, and confidentiality review is organized to ensure the confidentiality of customer information.

In accordance with the principle of "the person who is in charge of business is responsible for confidentiality", Anshan Iron and Steel strictly abides by the confidentiality system of customer information, and effectively protects customer information by taking measures such as restricting customer management authority and excluding the sales management system from the network. In 2018, there was no leakage of confidential information from customers.

Pansteel has formulated management documents such as the *Confidentiality Management Measures* and the *Market and Customer Management Measures*, and adopted systematic and hierarchical management for customer files to ensure customer information security.



A win-win partnership is established to jointly build a community of shared future for humanity. Ansteel Group adheres to the win-win development featuring fairness, justness and mutual benefits, shares its own development experience with partners, and facilitates common progress, bringing the power of China to the development of steel industry.

In 2018, the responsible purchase ratio reached 100%, the rate of electronic bidding was 100% and the rate of public procurement was 95.7%

The coverage of supplier access standard reached 100% in Anshan Iron and Steel

The company introduced **83** quality suppliers for raw materials and fuel, and wed out **97** suppliers, and the number of qualified suppliers was **218**

The contract performance rate was 100% in Pansteel



Feature

Participating in CIIE, and Serving as the Promoter of Steel Industry Ecosystem

In November 2018, China International Import Expo (CIIE), the first state-level exhibition themed on "import", was held in Shanghai.

Ansteel Group participated in CIIE and successfully held Steel Industry Chain Cooperation Forum. At the forum themed on "green, intelligent manufacturing, and win-win", Ansteel discussed eco-friendly, win-win, and innovative industry ecosystem with steel industry practitioners at home and abroad, and established the image of responsible Chinese steel enterprises.

Building the platform for exchange and communication

More than 80 countries showcased their achievements, and more than 3,000 companies from over 130 countries and regions attended the CIIE. We seized the opportunity to show the world our corporate mission and determination of "Producing better material, Creating more wonderful life", build up the inclusiveness of open cooperation, the strong sense of industrial responsibility as well as the open and cooperative attitude and action of the Group in all aspects. This plafrom also helps us display high quality products and services, establish an open, innovative and responsible brand image, and expand the channels of international exchange.



Photo with Metso Minerals at exhibition booth

Strengthening communication with partners

Ansteel Group actively visited its partners, carried out trade and technology exchange with exhibitors through multiple forms, channels and at multiple levels, and strengthened the introduction of equipment and technology and the expansion in international market.

Promoting industry exchanges

Ansteel Group organized and participated in more than 10 on-site activities, and strengthened discussions and exchanges with Chinese ministries, famous experts and scholars, and advanced enterprises in the industry.

Broadening global vision

Ansteel Group conducted targeted and in-depth technical and business exchanges with partners, and comprehensive learned advanced industry technology and concept globally, so as to contribute to highend intelligent manufacturing of the Group, and promote the globalized development of Chinese steel industry.



Ansteel Group signs the contract with Joy Global Co. Ltd

Promoting cooperation in the steel industry chain

Ansteel Group promotes the development of Chinese steel enterprises with an open attitude and constructs a win-win ecology with many upstream and downstream enterprises around the world. We do our best to obtain high-quality raw materials and fuel and equipment globally, and purchase high-quality iron ore, coal, complete sets of equipment and spare parts from Australia, Brazil, Switzerland, the United States, Germany, southeast Asia and other countries and regions. Besides, we have established strategic partnership with ThyssenKrupp, Kobe Steel and other world-class enterprises, and cooperate in R&D field. Our products cover 7 application fields, including railway, ships, and bridges.



Seizing the opportunity of CIIE, we actively promoted the products and services of Ansteel Group, and explored potentials for cooperation.



Ansteel Group signed contracts with Primetals Technologies, ABB, GFM and other overseas suppliers, and showed the world its action and good wishes of strengthening openness and cooperation and building the value community of global steel industry chain.



Ansteel Group is willing to share interests, integrate and grow together with partners in steel industry chain, and jointly build a global steel community with a shared future; we hope to further deepen and expand cooperation, construct a new pattern featuring openness and cooperation, jointly promote the sound development of Chinese steel industry and contribute to the healthy development of the world's steel industry.

----Yao Lin, Chairman of Ansteel Group at the CIIE



Ansteel Group is a successful example of high-quality development of Chinese steel industry, and also a strong proof of the close integration of Chinese steel industry with global steel industry chain and economic value chain. We hope that global steel industry chain will continue to deepen cooperation, and facilitate the integration of steel industry value chain.

—Nae Hee Han, Director of Economic Studies and Statistics at the World Steel Association at the CIIE

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Conducting Strategic Cooperation

Adhering to the spirit of being more open and progressive, we actively broaden our horizon, strengthen cooperation with partners in all-round, high-level and multi-range ways, enhance ability to jointly resist market risks and achieve mutual benefits and win-win results through complementary advantages and partnership among giants, so as to continuously promote high-quality development of the industry.

Strengthening overseas cooperation

We take the initiative to play our comprehensive advantages in planning, design, manufacturing, construction, management and operation of metallurgical industry, actively participate in the Belt and Road projects, and promote the international output of steel projects, the material industry we work on. Through the close cooperation between industry services and Ansteel international capacity cooperation projects, we take multiple measures to deepen overseas cooperation.

In-depth research

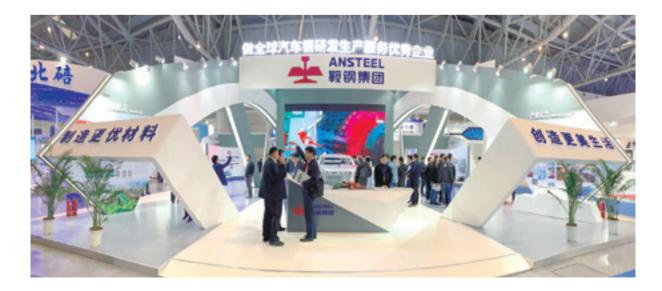
We conducted in-depth research on the investment environment and development needs of the steel industry in countries along the Belt and Road. Under the investment guidance of "adhering to the principle of quality and benefit", we have identified Southeast Asia as the key investment area. We have conducted extensive exchanges with governments and enterprises in many Southeast Asian countries, and investigated and demonstrated capacity cooperation projects of steel.

Partner selection

We mainly choose local enterprises with good credit, market resources, familiarity with Southeast Asian steel market, and great market development potential as partners, so as to reduce investment risks, realize full connection between our supply advantage in the main steel industry and local demands, and increase the success rate of international capacity cooperation projects.

Platform construction

In 2018, we fully sized the opportunities brought by Belt and Road Initiative, built a platform for overseas investment outside Hong Kong, promoted key investment projects in Southeast Asia and accelerated the pace of international business layout.



Deepening industry exchanges

We actively participate in international forum and industry events, learn advanced industry experience and technology, strengthen international exchange, and contribute to the sound development of Chinese steel industry and global steel industry. We have exchanged visits with many well-known enterprises, such as Kobe Steel, ThyssenKrupp Group, SMS Group, Gindalbie Metals Inc., Itochu Corporation, China Steel Corp, Primetals Technologies, Companhia Vale Do Rio Doce, and E United Group, to discuss the situation, development trend, cutting-edge technologies and areas of cooperation of international steel industry.

- On the 10th China International Steel Congress, Yao Lin, Chairman of the Board and Party Committee Secretary of Ansteel Group, delivered a keynote speech themed on "thinking and exploring on the high-quality development of steel industry", and discussed many issues such as new era of Chinese steel, world steel management, technological innovation and breakthrough, management reform and overturn, together with guests under the topic of Merger and Breakthrough.
- At 2018 Beijing summit of the Forum on China-Africa Cooperation (FOCAC), the Ansteel delegation seized the opportunity to carry out project negotiation and connection, and actively expanded the project cooperation under the Belt and Road Initiative.
- At the 52nd annual meeting of World Steel Association, Ansteel delegation held in-depth talks with the director-general of World Steel Association, representatives from Kobe Steel, Primetals Technologies, and Itochu Corporation, exchanged views on current situation and future trend of the international steel industry, and reached consensus on further cooperation.
- Ansteel Group participated in several international conferences, including the Eighth International Congress on the Science and Technology of Ironmaking, 2018 International Symposium on Thin Slab Casting and Rolling, and the Sixth International Conference on Advanced Steels. Besides, famed experts from home and abroad were invited to give academic reports in the Group, so as to strengthen the exchange and learning of advanced technologies.
- The 18th Plenary Meeting of ISO/TC102 Iron Ore and Direct Reduced Iron, which was sponsored by the Standardization Administration of PRC and organized by Ansteel Group, was held in August 2018. A total of 96 representatives from 9 countries including Brazil, Canada, Germany, Japan, and the Netherlands, attended the meeting. They jointly planned to conduct cooperation and exchange in iron ore field globally, study and formulate technical standards of international iron ore industry, and maintain the order of global iron ore industry, so as to promote the sound development of global iron ore enterprises.



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Promoting bank-enterprise cooperation

Ansteel Group deepens communication with financial institutions, carries out business cooperation with major banks continuously, and steadily improves long-term stable bank-enterprise partnership to jointly foster industry development. We expand financing channels, optimize debt structure, strictly control investment management, and implement market-oriented debt-to-equity swap. As a result, our asset-liability ratio has dropped to 69.55%, while the operating efficiency of asset has steadily increased. The functions of financial sharing platform have been gradually improved. Angang Steel Company Limited successfully issued H-share convertible bonds totaling HK\$1.85 billion, becoming the first listed Chinese steel enterprise that has issued convertible bonds with H shares abroad.

Case

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Deepening cooperation with financial institutions

Pansteel has continuously deepened cooperation with financial institutions, and achieved remarkable results in 2018:

Exploring innovative cooperation

CCB Capital Management Company invested RMB 800 million in Pansteel Vanadium Co., Ltd, Pansteel Xichang Steel & Vanadium Co., Ltd, and Ansteel Mining, laying foundation for further innovative cooperation between banks and enterprises.

Maintaining the scale of credit granting

When frequent fluctuations occur to domestic capital market, large banks in many countries still maintain the credit scale granted to Pansteel, and all the credit products still keep the benchmark interest rate, effectively reducing the financing cost.

Expanding financing channels

In April and August 2018, with Pansteel Vanadium Co., Ltd as the main body of financing, Pansteel successfully issued small public offering corporate bonds by stages in Shanghai Stock Exchange, raising RMB 2 billion in total. This was the first time that Pansteel had issued small public offering company bonds in the securities market, with the interest rate 0.5-1 percentage point lower than those of the same rating in the same period.





Promoting the Responsible Procurement Supply Chains

We strengthen the building of responsible supply chains, optimize supplier management, implement responsible and green purchasing, and promote the transparent procurement system. Also, we safeguard fair competition in the supply chain, and improve the CSR sense and CSR capability of supply chains for the win-win outcome and sustainable development shared with suppliers, shouldering the responsibility vested by the society. We keep raising suppliers' awareness of social responsibility and promoting changes in actions. We add the requirement of CSR fulfillment in supplier audit, deepen the CSR awareness of upstream and downstream enterprises in the procurement supply chains, and jointly cultivate the corporate culture of responsibility, so as to form a community of social responsibility for partners.

Strengthening procurement supply chain management

We set up a sharing platform for suppliers, implement centralized management of suppliers' registration, and offer one-stop convenience service to the self-service registration of suppliers. We continue to improve the assessment standards for admitting suppliers, select socially responsible suppliers who comply with laws and regulations, protect the environment, protect labor rights and interests, and operate in good faith, and gradually build up an ecosystem of procurement supply chain featuring responsibility, ecofriendliness, integrity and sustainability. All of our purchases meet the requirements of social responsibility, and the responsible purchase ratio in 2018 reached 100%.

Regular assessment

We review suppliers quarterly and annually, offer preferential policies to excellent suppliers, such as benefits in share and payment, and encourage and attract high-quality suppliers.

Dynamic supervision

We force suppliers who have practiced fraud, dishonesty or damaged the interests of Ansteel Group and society to withdraw, and to put them on blacklist.

Anshan Iron and Steel

In 2018, the supplier management system was revised, and the coverage of supplier access standard reached 100%. Besides, the company strengthened dynamic management of suppliers, conducted dynamic assessment of suppliers according to the different standards, including keeping contract, warning, fine, rectification, terminating contract and disqualification, and control risks of procurement.

In 2018, the company introduced 83 quality suppliers for raw materials and fuel, and wed out 97 suppliers. And the number of qualified suppliers was 218 by the end of the year. A total of 24 general suppliers were upgraded as strategic or key suppliers, while 4 strategic or key suppliers were downgraded to general suppliers. Throughout the year, 35 suppliers received written warnings, 12 were ordered rectifications, 81 were disqualified from the materials suppliers, and 12 were disqualified from all types of suppliers.

rectifications, of were disqualified from the materials suppliers, and 12 were disqualified from all types of suppliers.

The company implements annual evaluation system of suppliers, and conducts quantitative evaluation and dynamic monitoring of suppliers from the aspects of cooperation, performance ability, quality and honest operation on a quarterly and annual basis. And Pansteel regularly releases the *List of 100 Suppliers Ranking Bottom in Quarterly Evaluation*, and urges the lower-ranking suppliers to make corrections. Besides, Pansteel requires admitted suppliers to sign a letter of commitment for honest and clean operation and a clarification letter for no illegal operation record within three years.

Case

Anshan Iron and Steel selected as the pilot enterprise for innovation and application of national supply chains, and the pilot unit for standardization of logistics service

In 2018, Chinese Ministry of Commerce and other 7 ministries selected pilot cities and enterprises for innovation and application of supply chains, and Anshan Iron and Steel was one of the pilot enterprises.

The company is also the only pilot company among Chinese steel enterprises that was selected as the pilot unit for standardization of logistics service by Standardization Administration of PRC. It has drafted seven standards at national, industry, local and corporate levels respectively, including *Green Logistics Indicators and Accounting Method, Code for Packing, Marking of Steel Logistics*, and *Specification for Iron Ore Warehousing Service*. The company realizes smart synergizing and win-win supply chain system through the independent integration of Internet of Things (IoT), and strengthens risk identification, assessment and control of supply chains. The application of advanced ecological logistics technology leads the company to progress towards new industrialized and green factory.

Promoting transparent procurement

We have built a unified electronic bidding platform. Experts from a database are randomly selected in the bid evaluation process, and the whole process of bid evaluation is taped and filmed to ensure that the whole process is open, transparent and in compliance with the law. In 2018, the rate of electronic bidding was 100% and the rate of public procurement was 95.7%.



transparency, cost reduction, security and efficiency



legal compliance to keep transparency; unified platform and centralized bidding; direct purchase to guarantee quality and adding values; optimizing standards for economic procurement; reducing steps to enhance efficiency; information sharing for business collaboration

Anshan Iron and Steel

The company implements comprehensive evaluation method for procurement, gathers quality suppliers, and forms a transparent, fair and standard procurement ecology to practice the new concept of "innovation, coordination, green, openness and sharing" with excellent partners. In 2018, the public bidding rate was 85.22%. Through public bidding, the company could accurately track the market price, and lay a foundation for reducing the cost of bulk raw fuel systematically.

Pansteel

Pansteel carries out on-site evaluation on suppliers, promotes suppliers to comply with relevant laws and regulations in terms of safe production, environmental protection, pollution prevention and other aspects, and facilitates partners to fulfill their social responsibilities. It updates the information of resources, production, logistics, environment and ecology in real time, and improves the sourcing ability of the supply chain for procurement. Besides, Pansteel allocates purchasing needs to surrounding regions, so as to drive the economic development of western Sichuan Province and fulfill corporate social responsibility.

Supporting Fair Competition

Anshan Iron and Steel

Procurement of raw fuel: The company increases the guarantee of procurement system, regularly checks the compliance of the implementation of the system, and provides guarantee for the fair procurement of raw materials.

Procurement of equipment and materials: The company integrates and optimizes the procurement of materials, and establishes conditions for suppliers to gain access. It conducts bidding for procurement and all suppliers meeting the entry conditions can participate in procurement, expanding effective competition. Besides, the company promotes online procurement actively, implements e-commerce procurement of general standard equipment and materials, and ensures an open, fair and just procurement.

Pansteel

The company formulates *Rules of Marketing Management* and *Rules of Market and Customers Management*, which explicitly stipulate the conditions for customers to enter, be forbid from entry, demotion, withdrawal and others. Also, *Rules of Market and Customers Management* regulates that with approval of the company, the cooperation should be terminated with customers who intentionally not to perform the contract, seriously break faith, and not to perform the product sale tender or bidding for more than 3 times a year, so as to build the atmosphere of fair competition.

According to the *Rules of Contract Management*, the contract should be reviewed by hierarchy authorization. Suppliers are urged to perform the contract on time and supply quality goods by margin system. And contract performance and supply quality shall be tracked and supervised. In 2018, the contract performance rate was 100%.



NG TECHNOLOGICAL
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AND SERVICES TO BUILD A
HIGH-QUALITY ANSTEEL

OOPERATING WITH ARTNERS TO BUILD A WIN-



A good ecological environment is the basis for achieving sustainable development of human beings and the society. Lucid waters and lush mountains are invaluable assets. Ansteel Group has fully implemented the guiding principles of the 19th CPC National Congress and the National Conference on Environmental Protection, and carried out the ecological conservation principle of "lucid waters and lush mountains are not only invaluable assets" as well as the development vision of "Green Steel". Protecting the eco-environment as we protect our eyes, and treating it as we treat life, we spare no efforts to tackle pollution and solidly promote environmental protection and energy conservation, so as to comprehensively win the battle against pollution. We actively fulfill our responsibility as a central SOE and promote green development, striving to create a beautiful Ansteel always with "blue sky, clean water, and green grass".

In 2018,we improved the recycling and utilization of secondary resources, and reduced the consumption of coal and electricity, which totally created benefits of RMB 60 million, and comprehensive energy consumption per RMB 10,000 of output value was year-on-year decrease 0.09%

No environmental pollution incidents occurred

Completed over 260 key projects for energy conservation, emission reduction and pollution control with an investment of more than RMB 12 billion for many years

Angang Steel Company Limited Bayuquan Steel Subsidiary was listed into the **Top 10 Excellent Green Companies**

Pansteel Xichang Steel & Vanadium Co., Ltd won the title of "Top 10 Advanced Green Companies 2018" in China

Pansteel Xichang Steel & Vanadium Co., Ltd won the honor of "Eco-friendly and Credible Enterprises" in Sichuan province



Promoting Comprehensive Utilization to be a Transformer of Eco-Environment

Bayuguan Subsidiary has incorporated the environmental improvement, development, protection and influence into its development strategy. Aiming to build a green model company pursuing circular economy and sustainable development, the company follows the vision of coordinated development and harmony between the economy, society and environment, and won the title of "Top 10 Excellent Green Companies 2018".

power generation,

which accounted

for 74.3% of the

power used in the

company, making it

a leading company

in the industry.

The company has recycled major iron-containing solid waste through specific processes. and 30.1% of the solid waste has been reused in production, which is at top level in

The company has established an industrial chain for the recycling of secondary resources, so as to turn waste and useless materials into useful commodities. The utilization rate of solid waste has reached 99.89%.

The company is the The company first steel enterprise with no coal-fired the use of clean boilers in northern energy, developed China. It reuses renewable waste heat and resources, and built 11 wind driven energy generated in steel production for generators.

The company has decreased the use of water by carrying out seawater desalination and recycling rainwate for the landscape irrigation, daily life, cleaning the roads and dust suppression in our raw materials

plants.





Strengthening Green Management

Protecting the environment is to protect productivity, and improving the eco-environment is to develop productivity. Guided by Xi Jinping's thoughts on ecological progress, we take the improvement of environment quality as the core, aim to create a beautiful Ansteel always with "blue sky, clean water and green grass" and actively implement the vision of green development. We have spared no efforts to combat pollution, and solidly promoted environmental protection and energy conservation. In 2018. we remained good performance in major energy-saving and emission-reduction indicators, fully accomplished the fifth-term evaluation indicators made by the SASAC and no environmental pollution incidents occurred.

Promoting ecological progress

To promote the harmony between human beings and the nature, we held a conference on ecological environmental protection in 2018, established the "Ansteel Leading Group for Ecological Progress", and formulated the Environmental Protection Responsibility System of Ansteel Group, thus fostering ecological development.

We formulated the Environmental Protection Responsibility System of Ansteel Group to clarify the duties of environmental protection at all levels, and implemented the system of "Party and government assume the responsibility and a post with double duty". At the same time, the energy-conservation and emission-reduction indicators have been broken down and included in the "performance evaluation of operators of subsidiaries", making sure the indicators have been effectively divided and the pressure passed to all levels. Since 2013, Ansteel Group has completed over 260 key projects for energy conservation, emission reduction and pollution control with an investment of more than RMB 12 billion, and made outstanding achievements in ecological protection. In 2018, the Group invested a total of RMB 1.872 billion in environmental protection, and carried out key projects including the coke oven desulfurization and denitrification project of Anshan Iron and Steel, the 4#5#6# converter primary dedusting transformation project of Anshan Iron and Steel and Pansteel Vanadium's waste treatment system upgrading and transformation project.

Launching the formulation of low-carbon development plan

In 2018, in response to climate change, the control of greenhouse gas emissions was included into the overall strategy for national economic and social development. In accordance with national carbon emission management and sustainable development requ irements, Ansteel Group has actively promoted to build a carbon emission management system, made low-carbon development plans and carbon reduction programs, so as to enhance our sustainability. Meanwhile, we also made medium and long-term carbon planning, invited experts for guidance, and improved carbon emission management and technical staffs ability to prepare emission reports and monitoring plans, so as to promote the improvement and development of our carbon trading system.

Pansteel set up a leading group for carbon emission management to prepare the Report on the Strategies for Carbon Trading and Report on Carbon Emissions of Pansteel.

Case

Ansteel Mining plans and carries out pollution prevention and control

Adhering to the principles of "green development, recycling development and low-carbon development", Ansteel Mining has promoted the coordinated development of business and ecological environment, and conducted life cycle management of the mine environment. By "controlling the pollution sources, strengthening technological innovation, enhancing the management, and improving the responsibility system", we promote green development and build a beautiful Ansteel Mining. In 2018, it was awarded the "Advanced Enterprise for Promoting Ecological Progress in China" and set up 6 national pilot green mining units.

Insisting on overall planning and strengthening the control of pollution sources

The company made development plans for environmental protection, clarified the timeline and roadmap, optimized the comprehensive indicators such as project scale, quality and effect, energy conservation, environmental protection, etc. It achieved the goal of "three simultaneous", that is, simultaneous design, construction, and meeting standards of the project and environmental protection facilities. It also sorted out problems environmental protection, and stepped up efforts to deal with past projects causing environmental problems as well as major pollution sources. By benchmarking international standards, the company formulated and improved scientific environmental protection management measures to enhance and establish environmental protection standards, and follow up relevant progress regularly.

Strengthening technological innovation and developing circular economy

Focusing on indicators including the land reclamation rate. comprehensive utilization rate of mining waste and tailings, utilization rate of water gushing out of the mine, and the reuse rate of wastewater, the company carried out research on disruptive mining process and treatment of sewage and solid waste, made good use of various environmental protection equipment and facilities, and strengthened land reclamation and afforestation to suppress dust and improve the surrounding environment, thus developing an ecological improvement technology throughout the production process.

Establishing a long-term mechanism and clarifying

the responsibility

Adhering to the overall requirements that "Party and government assume the responsibility and a post with double duty to realize joint management and coordination", the company specified the objectives by profession, subsidiaries and departments, established and improved the coordination mechanism and system. It clarified the responsibility for environmental protection, set up a responsibility mechanism for environmental protection targets, and strengthened follow-up evaluation.

Organizing exchanges and trainings on environmental protection

Valuing the efforts of the masses, we unswervingly pool the strength of employees for environmental protection. Emphasizing on raising their environmental awareness, we invited external and internal experts to provide professional trainings for officials and employees with a focus on laws, regulations, standards, process, technology and management about environmental protection. As a result, we have improved employees' awareness and enthusiasm for environmental protection. By making full use of internal and external resources, we also conduct exchanges on environmental protection to promote environmental management and technology.

In 2018, Anshan Iron and Steel hired experts from third-party consulting agencies to organize over 10 trainings on environmental tax and pollutant discharge permits with 400 participants.

In 2018, Pansteel organized 7 trainings with over 400 participants on relevant laws, regulations, technologies, policy change from pollutant charges to environmental tax, discharge permit application, and carbon emission management. The company carried out environmental inspections and exchanges with Anshan Iron and Steel, Zhansteel, Tangsteel, Hansteel and government departments. It also organized over 10 exchanges on environmental protection process technology with CISDI, CERI eco, BME, Guohui Group, etc. Pansteel has carried out research on energy-saving technologies such as low NOX combustion technology, thermal storage technology, furnace temperature control optimization technology with University of Science and Technology Beijing, Northeastern University, Anshan Institute of Thermal Energy, etc. The results have been applied to heating furnaces.

Case

The project of "Development and Application of Clean and Efficient Coking Technology and Equipment" undertaken by Ansteel Group wins the first prize of National Science and Technology Progress Award

In 2018, Ansteel Group, as the main participating enterprise, won the first prize of National Science and Technology Progress Award for the "Development and Application of Clean and Efficient Coking Technology and Equipment" project after more than 10 years of joint research. This technology aims to solve key problems in clean and efficient production of the coking industry and takes a leading position in the world with complete independent intellectual property rights.



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Promoting Green Production

We develop a circular economy featuring "green development vision and low carbon operation", and strictly implement the new *Environmental Protection Law of the People's Republic of China* and environmental protection standards for the steel industry, so as to build a resource-saving and eco-friendly enterprise, and coordinate our production and operation with environmental protection. In 2018, we kept improving major energy conservation and emission reduction indicators with no pollution incidents and continuously decreasing pollutant emissions.

Strengthening energy conservation and emission reduction

Dedicated to building a "green Ansteel", we carry out technological transformation to promote green development featuring energy conservation and environmental protection. In 2018, we improved the recycling and utilization of secondary resources, and reduced the consumption of coal and electricity, which totally created benefits of RMB 60 million, and comprehensive energy consumption per RMB 10,000 of output value was year-on-year decrease 0.09%.



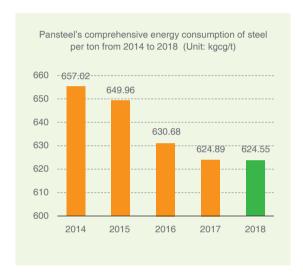
Intelligent and efficient energy management

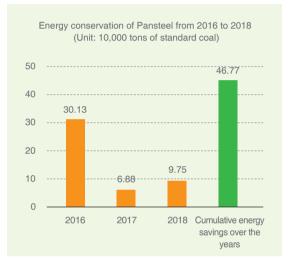
ase

Pansteel vigorously upgrades and applies energy efficient technologies

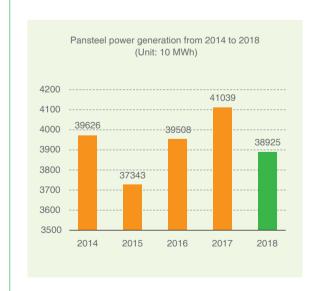
Pansteel uses external services with the cooperation modes of energy performance contracting, sharing benefits and payment by instalments. It adopted energy efficient technologies and equipment such as energy efficient motors (fans, pumps) and 3-D flow technology. In 2018, the company upgraded 40 sets of energy efficient water pumps and one set of energy efficient fan, saving 10 GWh and 5 GWh of electricity respectively in the year.

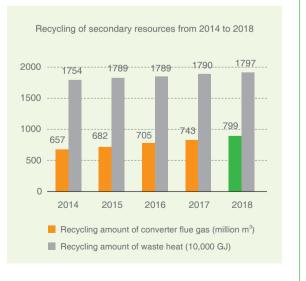
In 2018, Pansteel kept optimizing major energy conservation indicators. The comprehensive energy consumption of steel per ton was 624.55 kg of standard coal, down by 4.94% as compared with 2014. Between 2016 and 2018, the company saved a total of 467,700 tons of standard coal, and completed the energy conservation targets made for the "10,000 enterprises" in China and "100 companies" in Sichuan province.





Pansteel benchmarked the recycling of secondary resources. With the benchmarking and relevant measures, in 2018, the company recycled 799 million cubic meters of converter gas and 17.97 million GJ of waste heat steam, an increase of 18% and 2.5% over 2014 respectively.





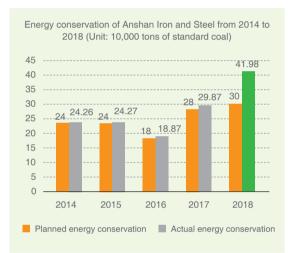
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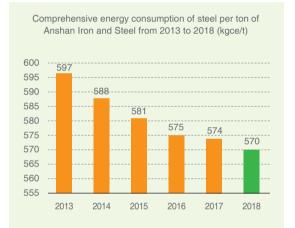
Case

Anshan Iron and Steel promotes the application of energy efficient technologies

Anshan Iron and Steel has strengthened energy conservation management to promote the upgrading of energy efficient technologies, process and equipment, which has made remarkable effects. In 2018, the company carried out 12 energy conservation projects with a total investment of RMB 733.44 million and an estimated annual benefit of RMB 466.59 million. The comprehensive energy consumption of steel per ton is low as compared with other key steel enterprises, and we have saved 419,800 tons of standard coal.

In 2018, the company applied a number of energy-saving technologies such as CCPP, blast furnace gas recovery technology, and fan permanent magnet speed control, and conducted research on oxygen-enrichment in furnaces, total nitrogen extraction, and flash evaporation of waste heat. The company adopted the low-vacuum heating technology in generating units and made a plan to eliminate or upgrade energy-intensive electromechanical equipment. It promoted the application of heat pump technology, and the heat pump units of the cold rolling mill in operation could save 4,000 tons of standard coal per year. The new CCPP generating unit of 180MW increased power generation from clean energy and reduced consumption of solid fuel by using gas.



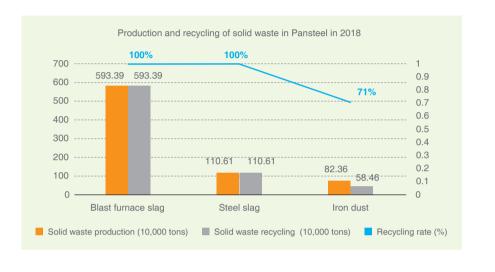






Case Pansteel strengthens the treatment of industrial solid waste

Pansteel continued to recycle and dispose solid waste as required to reduce sources of pollution, reuse the waste in production, and sort the waste before disposal in compliance with the law. The comprehensive utilization rate of resources continuously improved and hazardous waste was disposed according to relevant regulations. In 2018, we produced 7.86 million tons of solid waste, 7.62 million tons of which had been recycled and utilized, amounting to 97% of the total.



Case

Anshan Iron and Steel strengthens the treatment of industrial solid waste

Anshan Iron and Steel disposes solid waste in compliance with the law. It has released the *Measures on Waste Steel Recycling of Anshan Iron and Steel*, and actively explores new technology for solid waste treatment, and plans to introduce new process to dispose slag. In 2018, the company reused 4.65 million tons of waste steel and completed major indicators of resource recycling.

recycling
selling in compliance with the law

disposing to the dump in compliance with the law

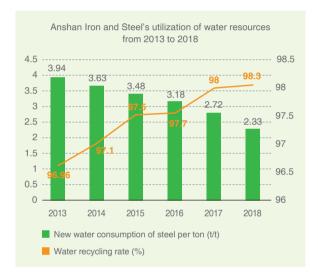
Useless solid waste

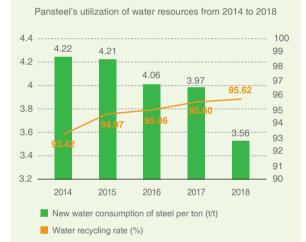
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Water utilization and protection

Attaching great importance to the protection and utilization of water resources, we promote careful use, protection and conservation of water, so that it can sustain the development of Ansteel in future. In 2018, Anshan Iron and Steel's water recycling rate is 98.3%. Through developing circular economy, Pansteel has established a long-term mechanism for water conservation and continuously improved the utilization of water resources. In 2018, Pansteel consumed 3.56 tons of water to produce steel per ton, down by 15.6% as compared with 2014, and the recycling rate of water reached 95.62%. Pansteel Vanadium was awarded a Watersaving Enterprise in Sichuan.







Indicators and water balance management

Regulating the water use and discharge management of each process

Circulating water system concentration ratio management

2.5 or more

Regulating water quality management

Water balance management

 Fixing the operation modes of domestic water, new water, and circulating water systems

systemsRegulating the water control technology

 Setting new water consumption limits for each process

 Benchmarking the industry to promote water saving and emission reduction Keeping average concentration ratio of the circulation system being at
 Water quality system management concepts

 Focusing on the management of major aspects, difficulties and key factors in the water system Implementing timing and quantitative control to water replenishment and drainage

 Controlling water discharge to external area

 Predicting the change of water use and discharge for maintenance

 Reducing system damage caused by water consumption fluctuation and large amount of water discharge because of maintenance

Measures taken by Anshan Iron and Steel to improve the utilization of water resources

Completely solving the problem of coking waste water treatment

The treatment of coking wastewater was once considered to be the most difficult as compared with other kinds of industrial wastewater. Pansteel Coking Plant is located in the plant of Pansteel, adjacent to Jinshajiang River. In 2017, Pansteel Coking Plant determined to adopt the advanced treatment process with anoxic-aerobic biochemical treatment and ozone (catalytic) oxidation technology as its core, so as to improve wastewater discharge standards, make sure the treated wastewater could be discharged directly and reused, thus protecting the Jinshajiang River.

The project was officially started on September 1,2017. On December 31 of 2017, the biochemical system was to treat wastewater. In February 2018, the advanced treatment system was put in operation. The coking wastewater treatment station covering an area of 7,500 square meters has become a new "environmental landmark" in the plant of Pansteel. The coking wastewater has been reused after being treated by the advanced phenol-cyanogen wastewater treatment system. These represent new progress of Pansteel in wastewater treatment.

Building green mines

We want not only growth in profits but also lucid waters and lush mountains. We build eco-friendly and green factories with plants to create a simple and low-carbon office space, and basically have achieved the goal of building a beautiful Ansteel. Insisting on protecting eco-environment to benefit the people, we create a good production and living environment for employees and citizens.

Case

Case

Ansteel Mining builds eco-friendly mines

Aiming to "build a world-class iron mine enterprise", Ansteel Mining vigorously promotes a new mode of environmental protection and ecological reclamation to realize "mines with good ecological environment, production process benefiting the environment, and recycling of solid waste". The company was rewarded as "Advanced Green Metallurgical Mine Company in China", the multi-purpose ecological park of the large rocking dumping yard was selected as a "National Green Mine Demonstration Base". Since 2000, the company has invested a total of RMB 497 million, and planted 6 million arbors, 12.7 million shrubs, and 600,000 square meters of lawns. The ecological restoration area reached over 22.28 million square meters, 90% of which can be reclaimed.



Green mine built by Angang Group Anqian Mining Co. Ltd is surrounded by trees

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Through a series of measures to enhance engineering management and control, Ansteel Mining has comprehensively controlled the dust in tailings ponds and created social and environmental benefits, which was highly recognized by the environmental protection departments of the government.

- Investing about RMB 7.5 million to sprinkle dust suppressant over an area of nearly 4 million square meters, which helped to minimize dust by forming a film on the dust particles;
- Investing about RMB 15 million in four tailings ponds to install spray systems for dust control, covering an area of 1 million square meters;
- Controlling dust by ore drawing in the yard and with multiple pipelines, and maximizing the area of ore-mining;
- Using the 8 new water sprinkler trucks to scatter water within 30 meters around the road and inside the road of each tailing pond;
- In the winter, 4 sets of snowmaking equipment were used in each tailing pond for artificial snowmaking, which effectively controlled dust in winter

Factory greening and green office

Pansteel Group has increased the investment in greening and improved the environmental quality of the plant. The company invested more than RMB 32 million and carried out over 600 projects to comprehensively improve the plant environment. As a result, the environment of the plant was greatly improved.

Anshan Iron and Steel improves planting of protection forests in the east and west of the plant as well as Lingshan quarry, and comprehensively enhances the greening of the central avenue and Xi'nai avenue. At the same time, the company continues to build the museum and Zhuoxiu Garden, and enhances the greening of six lanes. In 2018, a total of 51,700 trees, 328,600 bushes, and lawns of 35,600 square meters were planted. Anshan Iron and Steel has a green landscape of 6,800,600 square meters, covering 40.53% of the plant.

Ansteel Group promotes green office and strengthens publicity and education through workshops, morning meetings, internal publications, blackboard and the Internet, so as to further enhance employees' awareness of green office.





Developing Green Business

We promote environmental protection in production and operation, and actively develop green products and energy cooperation projects, striving to create a better environment and foster the healthy and sustainable development of the society and economy. Anshan Iron and Steel has established the Angang Steel Energy Management and Control Center to give energy benefits equal importance as energy management.

Developing smart and green logistics

Following the idea of "logistics + Internet", Delin Land Port Company (Anshan) developed the "Delin Land Port Logistics Service Platform" and realized green transportation. By the end of 2018, the platform had opened more than 100 lines covering most of the provinces, cities and autonomous regions in China with 200 carriers, 4,403 vehicles and 4,576 drivers, and transported more than 2 million tons of goods. The platform has won many honors in the logistics industry. It was rewarded as a service provider for "Enterprise with Cloud Services" program of Liaoning province, and one of the "2018 Top 10 Innovative Enterprises Leading the Smart Logistics Industry in China" and the "2018 Top 10 Service Providers in Logistics Informationization in China". It also won the "Science and Technology Award of China Federation of Logistics & Purchasing" as well as "China Logistics Innovation Award".

Developing the circular platform

Jwell is a third-party trading platform for recycling materials, set up by Pansteel Jwell IoT Company. Based on the idea of "making the best use of materials and creating new value", Jwell promotes the recycles of all waste and outdated materials such as waste or substandard cold-rolled and hot-rolled materials, waste chemical materials and rubber, as well as outdated electrical and mechanical equipment. Jwell accelerates the delivery of used or waste materials in Panzhihua, promotes communication with customers, and provides one-stop solution to waste materials for our users. It has become the largest and most professional recycling platform in Southwest China, accelerating the recycling of waste materials.

Comprehensive utilization and sales of energy

Anshan Iron and Steel actively plans for the heat supply for citizens. With a heat supply service area covering 10 million square meters, the company expanded services to residents in 5 million more square meters in 2018. In order to ensure the heat supply quality, Anshan Iron and Steel gathered various forces to complete the new heat supply project. During the entire heat supply season, the company upheld the "people-oriented" principle and prioritized the heat supply for citizens.

Cryogenic liquids are one of the major surplus energy being sold, including liquid oxygen, liquid nitrogen, liquid argon, etc. While ensuring production and supply and promoting innovation and energy conservation, Ansteel Energy Technology Company has vigorously expanded channels to sell cryogenic liquids and achieve growth in sales volume, price and income.

Innovating in green products

The special solidifying agent produced by Anshan Green Resources Technology Company is a new type of environmentally friendly cementing material, which can replace traditional materials and can be widely used in highway and road construction, anti-seepage and reinforcement of water conservancy projects, mine backfilling, slag treatment, etc. The company mainly uses desulfurized fly ash, steel slag and slag powder to produce the soil solidifying agent, and adopts advanced (special) technology to realize comprehensive recycling of solid waste.

NOVATIVE ANSTEEL



Respecting the Value of Talents to Build a Dynamic Ansteel

Trusting its 120,000 employees wholeheartedly, Ansteel Group thinks for employees, and responds to their expectation. While improving employees' welfare, we also guide them to realize their value, pioneer in reform and innovation, and advocate open-mindness, so as to promote the high quality development of the Group. We vigorously advocate the role-model work ethic and craftsmanship to the good quality of our employees in the new era.

Training expenditure for employees is 145.56 million RMB

 $142,\!000$ employees shared the achievements of the reform and development, with an average per capita income growth of 14% within the Group

Responded to **25,600** opinions and suggestions sought online

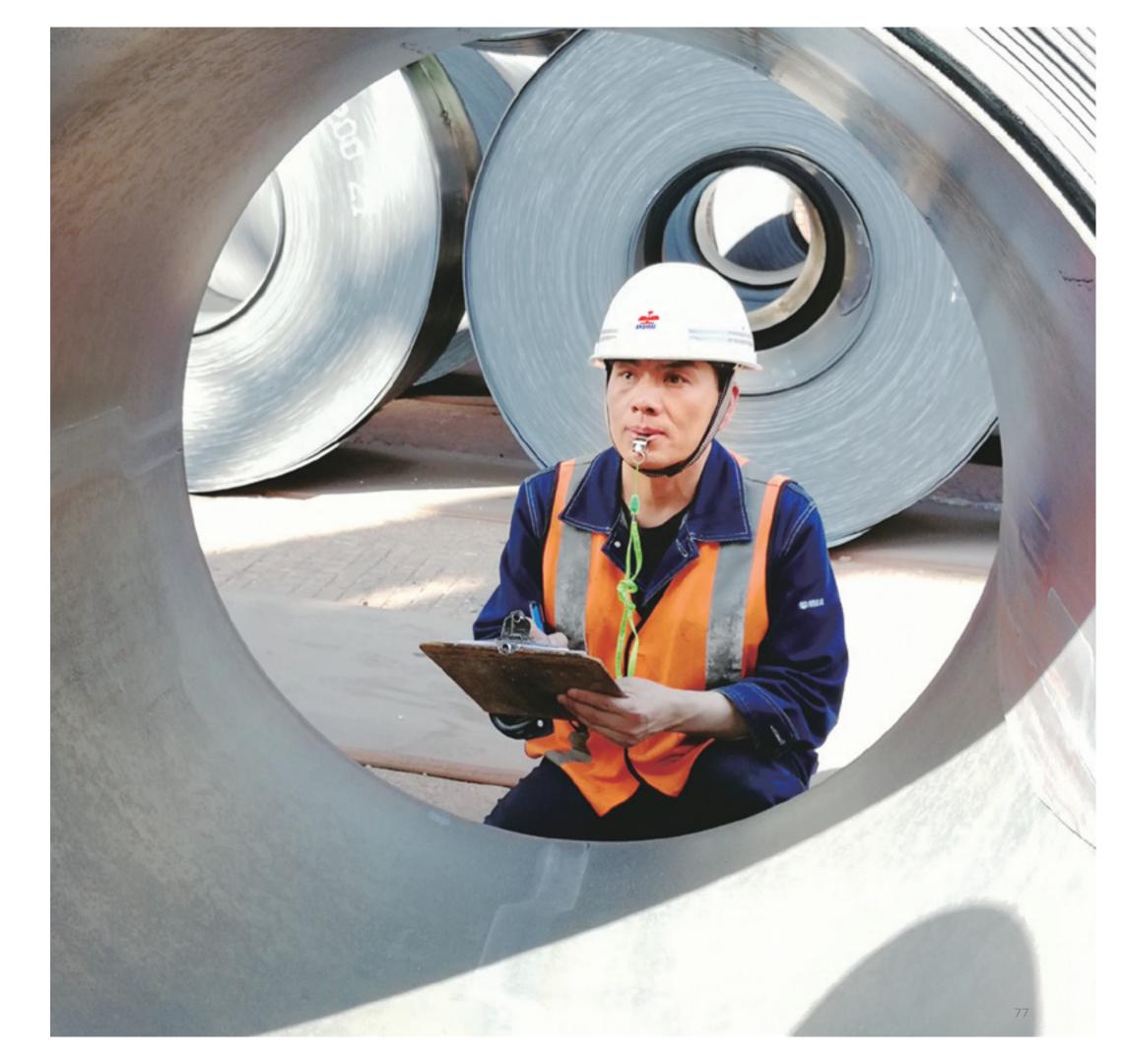
With **586** new projects for employees' benefits in service program themed "Practicing the Idea of Sharing and Caring for Front-line Workers"

Distributed relief funds of RMB 21.03 million

No fire accidents, and invested RMB 1.1 billion for work safety, carried out 1,198 emergency and fire drills

 ${f 1}$ of employees won the "China Skills Award", ${f 9}$ of employees won the honor of "National Technical Experts in the Steel Industry"

The Ansteel tug team won ${\bf 2}$ gold and ${\bf 1}$ silver medals in the TWIF World Indoor Championships



Feature

Cherishing Dreams, We Guide Employees to Make Achievements

"As each era has its own theme, each generation has a different mission." In the past 70 years since Ansteel Group was established, we have cultivated more than 10,414 model workers and pacemakers of cultural and ethical advancement. Among them 115 are national model workers, and well-known role models of the Group include Meng Tai, Wang Chonglun, Lei Feng, Guo Mingyi, Li Chao, ect.

As the cause of national rejuvenation and the revitalization of the Group becomes the mission of our generation, Ansteel's employees strive to make great achievements. We uphold the principles of innovation, down-to-earth, fighting spirit, and dedication, and meanwhile we expand business with bold practice. We seek development in the opening-up, and pursue success with endeavor, so as to truly become the "steel backbone" of the Party's cause and corporate development.

In 2018, Guo Mingyi, an employee of the Group, won the Outstanding Contribution Award of the 40th Anniversarv of China's Reform and opening-up. Liu Jiachun and Yu Shujuan were awarded the "National May 1st Labor Medal". 8 employees including Zhang Zhongwei were awarded the "May 1st Labor Medal of Liaoning Province". The Central Iron-making Factory of Anshan Iron and Steel was awarded the "May 1st Labor Certificate of Liaoning Province". 3 teams including the B-team of the rolling operation area of the steel mill of Pansteel Vanadium Company, won the honor of "National Worker Pioneer".

Insisting on craftsmanship and devotion

Lin Xuebin is the inspection team leader for electrical connection and also a senior technician of Ansteel Group, who has won dozens of honors and enjoy special government allowances. He has won the China Skills Award and the "National May 1st Labor Medal", and been awarded as a national model worker, the national technical expert, knowledge worker of central SOEs, outstanding and high skilled talent of Liaoning province, skilled talent with outstanding contributions in Liaoning province, as well as craftsman in Liaoning.

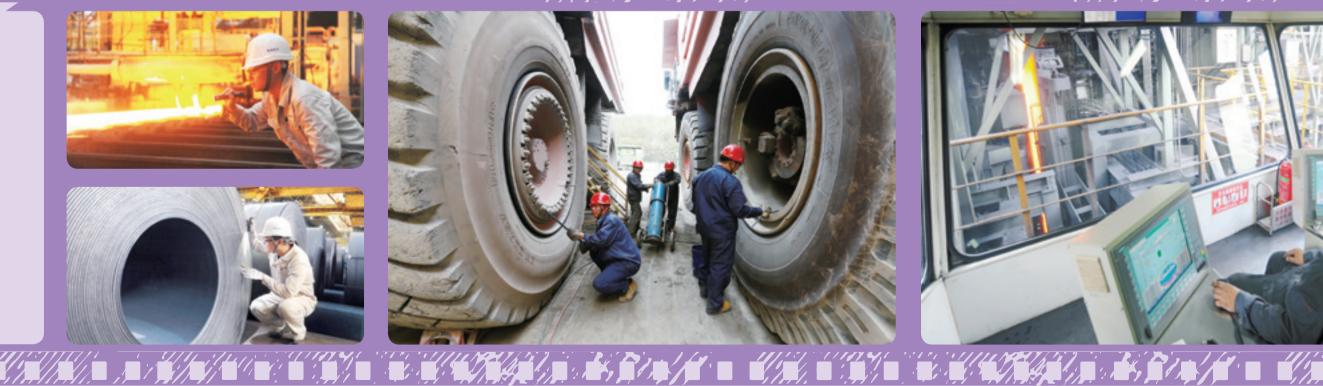
Lin Xuebin is a highly skilled talent of Ansteel in continuous casting. He created valuable principles for spot check (be diligent, careful, accurate and skilled, and on-time), and dealt with over a hundred electrical equipment failure cases, which made him "the person ahead of equipment failure". No production accident has occurred in the area he is in charge during the 15 consecutive years. He has been a frontline worker for 35 years, solved more than 200 production difficulties and created profits of RMB 300 million in total, making outstanding contributions to developing world class and domestically advanced continuous casting technology.



Lin Xuebin wrote several textbooks to share his experience to young workers, and paid valuable efforts for training of highly skilled workers. In the International Exhibition of Inventions and the National Exhibition of Inventions, he has won 2 gold medals, 3 silver medals and 4 bronze medals. He was awarded provincial (Liaoning) and national "master labs".











Enhancing Cultivation of Employees

Advocating the principles in "Ansteel Constitution", role-model work ethic and craftsmanship, we cultivate knowledge, skilled and innovative workers. By carrying out labor and skill competitions, actively building a training platform, and opening channels for career development, we lead the employees to participate in the reform and development of Ansteel and take the responsibility to fight for high quality development. In 2018, 1 of our employees won the "China Skills Award" and 14 were awarded as "Ansteel Craftsmen". The number of innovation studios for employees increased to 205.

Reform of the three systems

We have improved the competitive selection mechanism, and carried out the operator contractual management reform. The operators of 12 subsidiaries under contractual management have signed labor contracts and letters of business performance, through which we inspired their initiative and enthusiasm to take responsibilities and make achievements. We also have selected leaders to take a temporary post in outstanding enterprises and provide various trainings to broaden their horizons and enhance their innovation ability.

We have actively promoted the optimization of human resources, and 6,636 employees went through internal job transfer, replacement of labor, termination of labor contracts, or retirement. We also have carried out investigations on labor management, systematically classified staff of outsourced projects, and innovated in the labor management system to continuously improve the total factor productivity.

We have improved the structured salary budget management mechanism to maintain a reasonable proportion between ordinary employees, management personnel and enterprise operators. We have established and improved the mechanism of normal pay rises for employees, and implemented the base salary system as well as the incentive and promotion system, so as to motivate employees to make progress and achievements. We also set up a subsidy rise mechanism favoring front-line workers, and raise night shift allowances and team leader allowances.

Opening up career development channels

Making full use of the human resources sharing platform, we build a comprehensive job management system with "three elements and four dimensions", promote the transformation of rank management to post management, and open promotion channels, so as to promote the professional development of talents.

Case

Full-cycle career planning of Ansteel Group

Career planning covering all on-the-job employees

We innovatively build a post management system with "three elements and four dimensions", and improve the grade system of 10 posts including engineering, R&D, sales and skills based on the management category.

- Three elements: "post, ability, performance"
- Four dimensions: "post category, post level, post rank and salary scale"

Innovative mode of title management

- According to the principle of "what is to evaluate is what the one is responsible for", we make sure evaluation is in line with employees' responsibilities
- We have formulated online evaluation measures, optimized the professional title application procedure, and reduced application materials for the review

Diversified evaluation methods of vocational skills

- We adopt the identification and quality management system for vocational skills
- We have improved the diversified evaluation modes such as evaluation of professional qualification and certification of vocational skills

Insisting on building a professional technical team with high-level talents as its core, we give full play to the guiding role of high-level talents based on the selection procedure of recommendation from lower grade and ladder promotion. In 2018, we evaluated and hired 3,428 talents for different posts. Between 2016 and 2018, we totally organized more than 54,000 employees to participate in the certification of junior technician, intermediate technician and senior technicians as well as evaluation of vocational skills for senior technicians, and more than 21,800 of them passed the evaluation.

Diversified modes of trainings

We have established and optimized the training mechanism to closely meet the needs of key tasks in reform and development of the Group as well as job responsibilities, laying the foundation for cultivating talents who can lead the industry development and creating opportunities for cultivating "craftsmen of the great powers". In 2018, in the "Shougang Cup" Ninth National Steel Industry Vocational Skills Competition, 9 of our employees won the honor of "National Technical Experts in the Steel Industry". We also selected 10 outstanding technical staff and 77 technical experts. 30 model teams and 1,018 "five-good" teams were recognized in the benchmarking activity of "Five Good Teams".

Trainings for the management

29 leaders were selected to participate in the training organized by the Organization Department of the CPC Central Committee and the SASAC. 43 senior managers and 87 staff were selected to participate in the leadership trainings organized by China Business Executives Academy, Dalian and the training center of CISA respectively. We organized 32 special trainings of "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the guiding principles of the 19th CPC National Congress " with 2,449 participants in total. We organized 2 training courses for 100 young and middle-aged officials. We selected 7 managers to take a temporary post in China Life, SDIC and other companies.

Trainings of professional skills

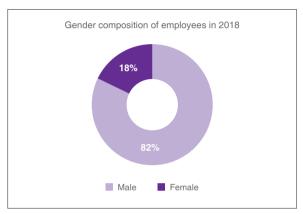
We held the seminar on scientific and technological leaders, training 40 chief engineers or higher-level experts. We organized English classes to train 42 technological talents. We carried out trainings of international talents and selected 50 participants. We continuously organized 80 training courses for team leaders and operation heads with a total of 3,815 participants.

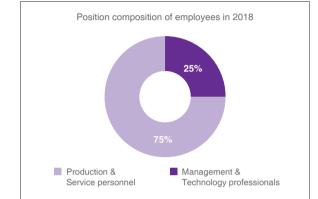
Diversified training methods

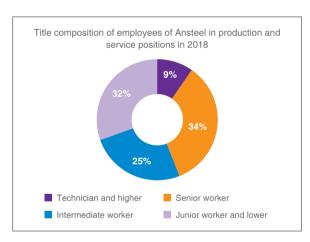
We cooperated with School of

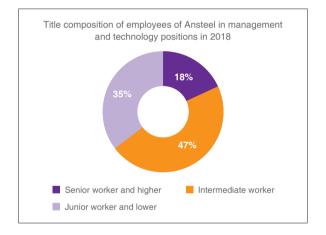
Continuing Education of Tsinghua University to organize remote trainings for improving the ability of team leaders. We carried out trainings for certification of vocational skills and for technicians of all levels, with more than 840 participants from key and general positions. We held 8 classes for furnacemen, converter steel-making workers, ect, with over 300 participants. We also carried out projects about the crane, PLC, and common fault analysis of the EIC system, and trained more than 400 workers.

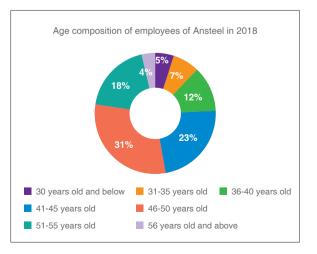
We promote democratic management and transparency of factory affairs. By improving the democratic management system with the workers' congress as its basic form and promoting harmonious labor relations, we earnestly safeguard the legitimate rights and interests of employees, effectively solve the problems that they are most concerned about, and benefit more employees with achievements of reform and development. In 2018, we had 113,595 employees, and terminated labor contracts with 625 employees according to the law.



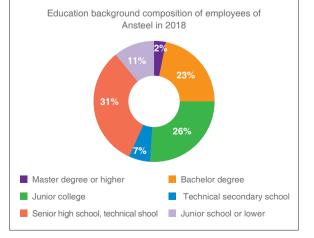








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2018

Number of employees on the job (Person)

Participants of trainings (Person-time)

88.505

113,595

Training expenditure for employees (RMB 10,000)

Training hours for employees (Hour)

100%

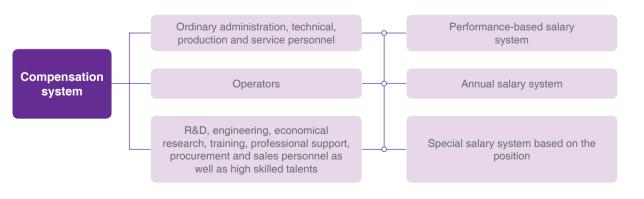
Labor contract signing rate

14,556

1,051,591

Salary and welfare

We strictly implement the Compensation Management Measures of Ansteel Group, establish a sound compensation system, and pay salaries in full and on time. We have improved the differentiated salary system that matches talent selection, the nature and functions of the Group as well as work performance. We share benefits and risks between the Group and employees, highlight key positions and core talents and make employees with outstanding achievements gain honor and reward. We have established the salary growth mechanism, raise living allowances, favor front-line workers with subsidies, and establish a reward mechanism for employees to share achievements. In 2018, 142,000 employees shared the achievements of our reform and development, receiving award of RMB 210 million. 14 key talents in R&D and high-skilled jobs received medium and long-term rewards. In accordance with the law, we provide all employees with five insurances (endowment insurance, medical insurance, unemployment insurance, employment injury insurance employment injury insurance) and housing provident fund as well as supplementary insurances, and protect employees' right to rest and vacation as well as their privacy.



The diversified compensation system of Ansteel Group

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COOPERATING WITH PARTNERS TO BUILD A WINWIN ANSTEEL

STRENGTHENING ENVIRONMENTAL PROTECTION TO JOINTLY BUILD A GREEN ANSTEEL

Enhancing democratic management

We have improved democratic management system based on the form of workers representative congress, promoted the principles of the "Ansteel Constitution", and revised the Administrative Measures for the Workers Representative Congress of Ansteel Group. We launched an activity to "seek advice online", and on the sixth meeting of the first Workers Representative Congress, we approved the Compensation Management Measures of Ansteel Group (Draft), 2019 Regulations on Strategic Performance and Remuneration Assessment, (Draft), and Resolution on the Administrative Work Report of Ansteel Group. In 2018, we effectively responded to 25,600 opinions and suggestions sought online.

Qidashan Concentrator of Ansteel Mining was selected as Demonstration Enterprise for Democratic Management and Transparent Plant Affairs in Liaoning province

Ansteel Transport Company and Ansteel Group Chaoyang Iron & Steel were awarded the Advanced Enterprise for Democratic Management and Transparent Plant Affairs in Liaoning province



The sixth meeting of the first Workers Representative Congress of
Ansteel Group

Occupational health and safety

Strictly following the requirements of the Law of People's Republic of China on Prevention and Control of Occupational Diseases and the Occupational Health Management Measures of Ansteel Group, we ensure that the operating environment meets relevant standards, and conduct occupational health inspections and investigate occupational disease hazards. In 2018, all 74,482 employees had physical examinations with health records. We purchased group health insurance for 23 female employees, who received compensation of RMB 1.11 million.

Case

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Pansteel carries out trainings on occupational safety as well as physiological and psychological health

Pansteel compiled special teaching materials for occupational diseases, carried out trainings on occupational health. It established the mental health center named "Bright Heart", and organized special trainings themed "Positive Mind". In 2018, 8,146 participants received occupational health trainings, and all of them passed the examinations. Physical examinations and health records covered all employees.1,000 participants received mental health trainings.





Mental health training activities



More Care for Employees

Insisting on people-centered development and upholding the "people-oriented" principle, we make every endeavor to benefit the employees, foster a healthy and positive corporate culture with full involvement, and continue to create greater benefits for employees.

Providing special services

In 2018, we further launched the special service program themed "Practicing the Idea of Sharing and Caring for Front-line Workers". With 586 new projects for employees' benefits, we warmed people's hearts, and continuously took actions to make every employee of Ansteel feel comfortable and happy.

Case

The special service program themed "Practicing the Idea of Sharing and Caring for Front-line Workers"

Emphasizing system building, we set up "five major" long-term mechanisms:

- Employees' basic salary and incentive mechanism
- The subsidy growth mechanism favoring front-line workers
- The special management mechanism of overtime wages within the salary budget
- Regulation and management mechanism for paid annual leave of employees
- Income growth mechanism for employee on leave

Emphasizing technological innovation, we try to reduce the labor intensity:

- Panzhihua Steel Titanium Sponge Subsidiary implemented the project of "Optimizing the On-site Operation Process in the Reduction and Distillation Operation Area"
- Ansteel Mining Machinery Company improved the production process of casting balls
- The electric company under Ansteel Information Industry Corporation Ltd. improved the on-site operation environment of the main workshop for motor repair

Emphasizing safety and environmental protection, we protect the health of employees:

- Anshan Iron and Steel has completed the renovation projects of roads within the area of power generation, wire manufacturing, steel processing, iron making, etc.
- The Anshan Iron and Steel Steelmaking Plant conducted a comprehensive investigation of multiple sources of dust
- Titanium Concentrating Plant of Pansteel Mining carried out 20 safety trainings with 461 participants

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Caring about employees' life

Caring for female employees

Ansteel Group enhances the legal and self-protection awareness of female employees, and pays them during the marriage leave, maternity leave and nursing period. No female employee is engaged in forbidden work. Ansteel Group has included the clauses of "providing a gynecologic examination and a breast disease examination for female employees every year" and "purchasing group health insurance for all working female employees" in the *Collective Contract* to effectively protect the legitimate rights and interests of female employees. We purchased group health insurance for 12,806 female workers in 2018.

In 2018, Zhang Weiwei and her family, who was from the Reception Service Company under Ansteel Zhongyuan Industry Company, won the honorary title of "the best family in China". By selecting the "Five Good Family" and "Special Family" in Ansteel Group and Anshan City, we gave play to the special role of female employees in promoting the family virtues of China.



Winning the title of "Sichuan Province May 1st Heroic Women"



Ribbon cutting ceremony of the Staff Bath

Caring for employees in need

Ansteel Group has built a support system and actively explored the integration of "relief, subsidy, skill training and policy". We set up records for employees with difficulties and established the regular visit system to implement "targeted relief" throughout the whole process of poverty alleviation. We carried out special activities to distribute relief funds, visited 48,576 persontimes of employees and retirees with all kinds of difficulties, and distributed relief funds of RMB 21.03 million. We reviewed and distributed medical relief funds of RMB 11.25 million in 2017, and prepared special relief funds of RMB 477,600 to 300 employees to help them receive kidney dialysis. In 2019, Ansteel plans to donate RMB 3 million holiday relief funds which will benefit 9,266 employees in need.



Wang Yidong from Anshan Iron and Steel visit employees in need $\,$



Li Zhen from Anshan Iron and Steel visit employees in need

Balancing work and life

Continuously implementing the "National Fitness Program", we hold a variety of cultural activities such as guessing riddles, photography and calligraphy exhibitions, as well as sports activities such as long-distance running,

mountaineering and ball games. We have created a relaxed and cheerful working environment, enhanced teamwork and cooperation, enriched employees' spare time and bring more happiness to them. In 2018, Anshan Iron and Steel and Pansteel won the first place in the national metallurgical sports meeting in terms of group score and the number of gold medals respectively. The Ansteel tug team won 2 gold and 1 silver medals in the TWIF World Indoor Championships.





Tug-of-war Team of Ansteel Zhongyuan Industry Company won the women's 500 kg championship in the 2018 World Indoor Tug-of-war Championship

Case

The second sports meeting of Ansteel Group

In September 2018, Ansteel Group successfully held the second sports meeting. There were 93 events, including exciting track and field competitions, as well as fun fitness events that promoted teamwork. The sports meeting selected 22 companies with advanced culture, 20 teams with sportsmanship and 13 companies with special contribution. As more than 5,000 participants and audiences from all production bases of the Group came to the sports meeting, we held more than 10 exchanges promote communication and understanding between employees.



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Emphasizing Work Safety

Work safety is about the life and property of employees. Always regarding work safety as our top priority, we adhere to the work safety guideline of "safety first, prevention-based, comprehensive management", and fully implement the *Opinions of the CPC Central Committee and the State Council on Promoting the Reform and Development of Work Safety* and the new *Law of the People's Republic of China on Work Safety*. Firmly upholding the principles of "priority to life, safe development", we contribute to the safe and stable development of Ansteel Group. We constantly promote the fulfillment of work safety responsibility, and further advance standardization of safety work. In 2018, we had no fire accidents, and invested RMB 1.1 billion for work safety. Ansteel Group and Bayuquan Subsidiary were awarded winning teams during the 2016-2017 National "Ankang Cup" competition.

Implementing the work safety responsibility

We have built a responsibility system for work safety that divides tasks, responsibilities and pressure to different levels, so as to promote responsibility fulfillment. The annual assessment of each subsidiary with contract management includes safety indicators. We improved the work safety responsibility system of subsidiaries, and signed letter of responsibility of annual safety target with 13 subsidiaries in 2018. We established a work safety responsibility system featuring "one post with one responsibility, one person with one responsibility list". We also carried out a work safety inspection for 2 months and rectified 510 hidden dangers in high-risk industries and crowded places in 2018.

Case

Ansteel Mining vigorously carries out standardization of safety work

Ansteel Mining has strengthened the construction of standardized safe enterprises, operation areas, teams and positions, and improved the evaluation and selection of "standardized safe star operation area" and "standardized safe operation area". Thus the company effectively promoted the standardization of management, workplace and operation, further regulated the safety protection of employees and improved the working conditions, creating a safe and comfortable working environment for employees. In 2018, 30 operation areas became "star operation areas up to the standardization of safety" and 1 operation area was reviewed as the "operation area up to the standardization of safety". As a result, we achieved full coverage of "operation areas up to the standardization of safety".

Strengthening safety management

We have made a plan to implement the *Opinions of the CPC Central Committee and the State Council on Promoting the Reform and Development of Work Safety*, which clarifies the guideline, basic principles and overall objectives of safe development. We made the plan systematically about 17 elements from three aspects including "improving and implementing the work safety responsibility system, enhancing the ability for basic safety guarantee and establishing the prevention and control system", laying a foundation for the safe development of the Group.

We have improved the emergency response mechanism for major and severe accidents as well as emergency response systems of Ansteel Group and its subsidiaries, so as to enhance the comprehensive ability to effectively cope with emergencies. We comprehensively regulate the whole process of rescue and treatment of injured employees, aiming to protect lives and reduce injuries. We set warning signs on accident spots, warning employees of the painful lessons. The new employees are required to wear the "trainee" armband in the factory, so as to remind the senior staff to pay special attention to their safety and prevent accidents.

Enhancing safety awareness

We organize the "Work Safety Month" campaign themed "My Action, Work Safety", set up a team with a general manager as the team leader, and issue a proposal to all employees with the theme of "My action, to be model in ensuring work safety". We carry out an investigation and rectification of hidden dangers, conduct a post operation procedure, and a self-examination and mutual inspection of operation. In 2018, during the work safety month, we investigated and rectified 3,176 hidden dangers in all of our subsidiaries, carried out 1,198 emergency and fire drills, and revised 552 articles of operation standards and regulation. We also organized team evaluation, and commended 200 excellent teams, aiming to raise the safety awareness and improve skills of employees.



Safety emergency drill

Case

Pansteel actively carries out safety education activities and training

- Formulated the Key Issues of Pansteel's Safety Education and Training in 2018
- Organized the third competition of papers and PPTs on safety education and training and selected 60 papers and 66 PPTs
- Prepared the Training Materials of Pansteel for Protection Against Major Dangerous, Toxic and Harmful Substances
- Organized 1 continuing education course to train national certified safety engineer and 2 training classes for work safety and management ability, with a total of 340 participants
- Conducted 12 training classes for improving safety management ability of team leaders with 576 participants



Always keeping in mind the mission entrusted by the country and history, Ansteel Group contributes to the society with its original aspirations, and promotes local economy and social harmony. Ansteel is dedicated to China's development by taking its responsibility, striving for the well-being of the people and benefiting the society, aiming to create a new era that highlights the charm, the song and the contribution of workers.

Supported the poverty alleviation 18 targeted regions. We carried out 106 poverty alleviation projects with a total investment of RMB 27.32 million

Spent RMB 3.8 billion and RMB 5 million respectively to purchase recourses including coal and iron ore as well as agricultural and sideline products

Set up 103 young volunteer service stations with 14,132 young volunteers from 168 teams, organized 1,311 volunteer activities with 15,694 young participants

Guo Mingyi won the title of "Pioneer of Reform"



Feature

Promoting Targeted Poverty Alleviation to Help Poverty-Stricken Areas

Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, Ansteel Group further implemented the principles of the 19th CPC National Congress as well as the strategies and policies on poverty alleviation made by the CPC Central Committee and the State Council. According to the requirements of targeted poverty alleviation, we focus on solving problem, and not only give relief and combat poverty, but also promote local development and education. Through promoting poverty alleviation by supporting local industry, people's livelihood, education, medical development, as well as Party building and sending talents, we help poverty-stricken areas to win the battle against poverty.

In 2018, we supported the poverty alleviation 18 targeted regions. We carried out 106 poverty alleviation projects with a total investment of RMB 27.32 million, sent 24 officials to take a temporary post to combat poverty, spent RMB 3.8 billion and RMB 5 million respectively to purchase recourses including coal and iron ore as well as agricultural and sideline products.

Honors won by targeted poverty alleviation areas and our officials working there in 2018 o-

"Demonstration Base of Poverty Alleviation Led by Party Building"—Gaoguan village on Liuguan Street of Panzhou City, Guizhou province

"The First Secretary of Excellent Villages in Poverty Alleviation in Guizhou Province" and "Outstanding Party Building Official in Panzhou City"—Xu Jun

Fully completed the *Responsibility Letter of Central SOEs for Targeted Poverty Alleviation*

Case

Poverty alleviation in all respects

In 2018, Ansteel Group implemented 47 poverty alleviation projects in Tajik Autonomous County of Taxkorgan in Xinjiang province (national targeted poverty alleviation county), and Panzhou City in Guizhou Province, spent RMB 10.976 million in total for poverty alleviation and raised funds of RMB 97,850 for local areas. We trained 566 officials at the basic level and 813 technicians, spent RMB 1.1798 million purchasing agricultural products from poverty-stricken areas, and helped these areas sell agricultural products for RMB 720, 900. We also spent RMB 3.4 billion purchasing coal from targeted poor counties.

Emphasizing top-down planning

Attaching great importance to top planning for poverty alleviation, Ansteel Group has established a poverty alleviation team led by our Party secretary and Chairman. In 2018, the theory center team of Ansteel Party committee organized 2 meetings to learn about poverty reduction, 2 meetings to summarize and promote poverty alleviation, and 7 special meetings on poverty alleviation. The poverty alleviation team members often went to the targeted areas to conduct research and learn about local condition. In this way they took targeted measures, considered the actual difficulties and needs of these regions, and adjusted the poverty alleviation plan. In 2018, the number of poverty alleviation projects for 5 targeted poor regions increased to 50, and the poverty alleviation funds reached RMB 13.6 million.



Investigating the project progress

Building professional teams for poverty alleviation

To strengthen local poverty alleviation teams, Ansteel Group assigned officials with rich management experience and technical expertise to targeted regions, who led the villages to get rid of poverty in a down-to-earth way. In 2018, we selected another more 6 employees for poverty alleviation. Ansteel Group formulated the Notice on Regulating the Insurance and Benefits for Dispatched Staff of Ansteel Headquarters and Administrative Measures of Ansteel Group for Dispatching Officials for Poverty Relief (Trial) to institutionalize and standardize the management of officials for poverty alleviation.

Strengthening inspection and guidance

To organizational guidance, Ansteel Group set up a leading group led by the Party secretary and the chairman for special governance of the work style in poverty alleviation. In 2018, we detected 21 problems in 3 aspects, and proposed 8 suggestions and requirements for rectification. By conducting investigation, paying visits, and carrying out inspections, we completed 2 reports on poverty alleviation for targeted areas. We pointed out 11 problems and gave 13 suggestions in the study of poverty alleviation theory, poverty reduction methods, project management and officials' work style.

Fully preparing for "targeted" poverty alleviation

Boosting self-sufficient development – supporting industrial development based on local situation: It is the fundamental strategy to develop local industries for poverty alleviation. Based on local situation, Ansteel Group combines local characteristics by giving full play to its advantage in technology, investment, construction, operation and management to achieve poverty alleviation by supporting local industry.

Case

Pansteel focuses on industrial development to lift people out of poverty by increasing their income

Pansteel has invested RMB 1 million in Qvjiazhuang village on the Liuguan street of Panzhou City and carried out poverty alleviation projects of Stropharia rugoso-annulata planting, shallot planting and vegetable greenhouse. The company adopted the mode of company management + cooperative+ farmer (shareholder), which combined "basic income + bonus" and provided stable income for the poor. In 2018, 2 companies were introduced to plant more than 50 mu of cash crops, lifting 29 poor households out of poverty.

Improving people's livelihood – With the aim of ensuring people's livelihood: Ansteel built roads, bridges, and canals for poor areas to provide convenient transportation, water use and irrigation, which changed the "life and transportation mode" and improved people's livelihood.

Case

Anshan Iron and Steel builds a flood-resistant bridge to ensure safe transportation

Anshan Iron and Steel invested more than RMB 1.7 million to help build a flood-protection bridge in Shihuiyao town of Xiuyan county, which completely improved local bridges' ability to resist flood, and ensured the safety of 840 villagers of 4 resident groups.

Supporting education - to avoid the intergenerational transmission of poverty: To combat poverty, we should improve education first and encourage aspiration. Ansteel Group has increased investment and support for severely impoverished areas, to improve local education quality.

Case

Pansteel sets up a scholarship to enhance the ability of making fortune

Pansteel invested RMB 994,400 to set up the "Pansteel Dream Scholarship", covering the tuition and living expenses for students from poor families in Sichuan Electromechanical Institute of Vocation and Technology. In 2018, the scholarship benefited 688 students from registered poor households.

Enhance Party building - building a bastion for the battle against poverty: Based on the experience of poverty alleviation led by Party building in Gaoguan village of Panzhou city, Ansteel Group turned the advantage of Party building in SOEs into an advantage in poverty alleviation, and built grassroots Party organization into a bastion leading people to win the battle against poverty.

Case

Pansteel promotes poverty alleviation through Party building

Pansteel carried out Party building with the organizations of Qijiazhuang village and Yanwuzhai village, assisted in construction of offices for Party members. Giving full play to the role of the first secretary dispatched to the villages, it promoted the intra-Party political life, enhanced the rally power of grassroots Party organizations, and served as a bastion for poverty reduction. In this way Pansteel continuously strengthened Party building to better lead poverty alleviation. In 2018, Pansteel invested RMB 700,000 to carry out paired Party building with 2 Party branches, and helped 2 poverty-stricken villages by paired assistance.

Case

Providing more assistance for Xinjiang in a flexible mananer

In 2018, Ansteel Group innovated poverty alleviation approaches by discussing about and carrying out targeted poverty alleviation activities with clear tasks and specified objectives based on the specific needs of local regions. To promote poverty relief in a flexible manner, we selected and sent 6 officials to the Autonomous County of Taxkorgan. Adhering to the principle of "targeted, practical and beneficial measures", Ansteel Group decided to carry out poverty relief in major posts of local poverty alleviation office, feed mills, the water supply and sewage company, boarding primary schools in urban and rural areas, the urban and rural construction and housing bureau,



the TV station and People's Hospital, which has played a positive role in comprehensively deepening reform, accelerating urbanization, and improving local people's well-being of the Autonomous County of Taxkorgan.

Residents in the Autonomous County of Taxkorgan of Xinjiang province often cannot receive effective treatment because of the poor local medical care. Ansteel Group Hospital sent 9 medical experts in 3 batches to the People's Hospital of Taxkorgan Tajik Autonomous County, who provided professional medical services for the public and helped improve local medical care and management. In 2018, we trained 19 medical workers and helped the hospital become a grade-A hospital of second class. Meanwhile, we spent RMB 1.97 million to help 36 village clinics and 5 community health service stations in the county purchase equipment and facilities, so that the villagers could access better medical treatment.



Ansteel Group Hospital provides voluntary medical service in Autonomous County of Taxkorgan of Xinjiang province



Passing Love By Promoting Public Welfare

Believing in "helping people with compassion and kindness", we always take the mission, the responsibility and honor to promote public welfare, actively help people in need, solve social problems and enrich people's cultural life.

Ansteel Zhongyuan Industry Company donates books to promote education development

Through the platform of "Sun Baojiang Love Studio", Ansteel Zhongyuan Industry Company carried out the book donation activity themed "enterprises pass love and donate books for the future" in Aizi Hope Primary School of Wangtuozi village in Jiucaitai Town, aiming to encourage local children's passion for study. In 2018, "Sun Baojiang Love Studio" has donated 130,000 books to 46 schools in poor areas.



Ansteel Zhongyuan Industry Company and the Sun Baojiang volunteer team donate books to the Hope Primary School

Pansteel art troupe enriches local cultural life

The art troupe of Pansteel carried out gave performances to workers in Panzhihua city, taught dancing and music for free, and created a great fantastic children play named "Sun Valley" based on local culture, aiming to enrich people's cultural life. Between 2014 and 2018, the art troupe totally gave more than 70 performances with over 100,000 audiences, and held 10 professional art training courses with more than 6.000 trainees.



Pansteel art troupe visits firefighters



Case

Ansteel Group wins the honorary title of National Volunteer Blood Donation Promotion Award

The employees of Ansteel Group actively participated in volunteer blood donation activities. Guo Mingyi, also called "Lei Feng of today", acted as a role model and encouraged more employees to donate blood. In 2018, Ansteel Group won the honorary title of National Volunteer Blood Donation Promotion Award.



The executive vice president of Ansteel Red Cross Society accepts the award



Guo Mingyi, also called "Lei Feng of today", takes the lead to donate blood

Offering Voluntary Services

We actively organize young volunteers to provide good, professional, efficient and friendly services for large events to fully demonstrate the excellence of young employees and a dynamic brand of Ansteel. We also volunteer to help the elderly and teenagers to fulfill our responsibility with actions. In 2018, we set up 103 young volunteer service stations with 14,132 young volunteers from 168 teams, organized 1,311 volunteer activities with 15,694 young participants.

Case

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Young employees of Ansteel actively participate in volunteer services

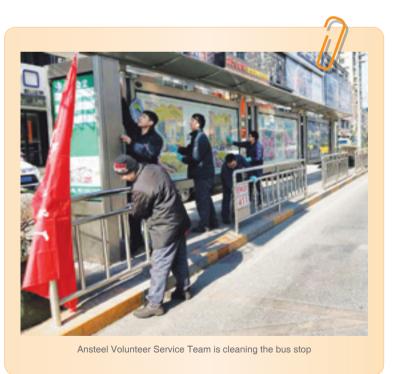
Young volunteers of Ansteel actively pass positive energy and serve as a brand-new card for serving the society. They actively carried out community volunteer activities and established a long-term mechanism for community volunteer services. In 2018, there were 4,583 participants in volunteer activities of 2,024 hours in total, providing services for people 6,500 person-times.



The young volunteers of Ansteel are making a vow



Pansteel Youth League Committee helps student in Yanbian County access to education





Ansteel Volunteer Service Team is cleaning the cinder



Ansteel Volunteer Service Team helps the lonely elderly people

Key performance

Category	Key indicators	Performance in 2018
	Operating Revenue (billion)	215.77
	Total Profit (billion)	2.07
	Brand Value (billion)	63.528
	Iron Concentrate (million tons)	40.49
	Iron (million tons)	34.76
	Steel (million tons)	37.36
	Steel Products (million tons)	34.91
	Titanium Concentrate (million tons)	1.004
	Titanium Dioxide (tons)	228,000
Economy	Other Titanium Products (tons)	3,720
	Vanadium Products (tons)	39,800
	Patents	1702
	The Total Number of Valid Patents	7880
	Invention Patents	3757
	Led the Formulation/Revision of International Standards, National Standards and Industry Standards	92
	Realized Legality Review for Major Decisions (%)	100
	Realized Legality Review for Important Systems (%)	100
	Realized Legality Review for Major Economic Contracts (%)	100
	Asset-liability Ratio (%)	69.55
	Environmental Pollution Incidents Occurred	0
	Energy Conservation of Anshan Iron and Steel (10,000 tons of standard coal)	41.98
Environment	Comprehensive Energy Consumption of Steel Per Ton of Anshan Iron and Steel (kgce/t)	570.2
	New Water Consumption of Steel Per Ton of Anshan Iron and Steel (t/t)	2.33
	Pansteel's Comprehensive Energy Consumption of Steel Per Ton (kgcg/t)	624.55

Category	Key indicators	Performance in 2018
Environment	Pansteel's Recycling Rate of Solid Waste (%)	97
	Pansteel's Recycling Amount of Converter Flue Gas (million m³)	799
	Pansteel's Recycling Amount of Waste Heat (10,000 GJ)	1797
-	Pansteel's New Water Consumption of Steel Per Ton (t/t)	3.56
	Pansteel's recycling rate of water (%)	95.62
	Labor Contract Signing Rate (100%)	100
-	Number of Employees on the Job (person)	113595
	Participants of Trainings (person-time)	88505
Ctoff	Training Expenditure for Employees (RMB 10,000)	14556
Staff	Training Hours for Employees	1051591
-	Employees Who had Physical Examinations (person)	74482
-	Coverage Rate of Physical Examination and Health Records (%)	100
-	Distributed Relief Funds (RMB million)	21.03
	Network and Information Security Incidents Occurred	0
Safety	Investment for Work Safety (RMB billion)	1.1
-	Emergency and Fire Drills	1198
	Responsible Purchase Ratio (%)	100
	the Rate of Electronic Bidding (%)	100
-	the Rate of Public Procurement (%)	95.7
-	Investment for Poverty Alleviation (RMB million)	27.32
0	Poverty Alleviation Projects	106
Society	Young Volunteers (person)	14132
	Young Volunteer Teams	168
	Participants of Volunteer Activities (person)	15694
	Young Volunteer Service Stations	103
	Volunteer Activities	1311

Outlook 2019

In 2019, we will hold high the banner of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and further implement the guiding principles of the 19th CPC National Congress and the second and third plenary sessions of its 19th Central Committee as well as the Central Economic Working Conference. Guided by principles embodied in General Secretary Xi Jinping's speech on the seminar on further promoting revitalization of northeast China, we will uphold and strengthen Party's leadership and follow the general principle of pursuing progress while ensuring stability. Through reform and opening-up as well as transformation and upgrading, we will comprehensively promote high quality development and celebrate the 70th anniversary of the founding of the People's Republic of China.

Comprehensively promoting Party building

We will thoroughly implement the general requirements for Party building in the new era, and give top priority to political progress. We will comprehensively improve the organization by building a loyal, responsible and high-quality official team with integrity and adopting the strategy of developing the enterprise by cultivating talents. We will promote cultural publicity and education, and improve Party conduct and anti-corruption, so as to continuously enhance Party building, quality and lead Ansteel to comprehensively achieve high-quality development.

Comprehensively promoting reform

In accordance with the pilot reform requirements made by the SASAC, we will deepen reforms at all levels gradually. We will deepen the reforms of the authorized operation system for state-owned capital, mixed ownership, diversity of equity, as well as the market-orientated operation mechanism, so as to fully release the development vitality.

Comprehensively promoting technological innovation

Taking technological innovation as the primary driving force, we will improve the science and technology R&D system, promote development led by technological innovation, and build an intelligent Ansteel. We will pursue common development with customers and even lead the development instead following others, by accelerating the transformation of driving forces.

Comprehensively promoting industry upgrading

Focusing on the goal of strengthening the material business, continuously upgrading the business of mineral resources, and developing industrial services selectively, we will accelerate the transformation and upgrading of the traditional industry and vigorously expand new industry and business.

Comprehensively promoting management improvement

We will create an enterprise management system that meets the requirements for high-quality development with a focus on management reform, law-based management, quality and efficiency improvement as well as green development. We will continuously improve management efficiency and pursue lean management.

Comprehensively promoting shared growth

Adhering to the people-centered principle, we give full play to the role of employees as the main force and the role of the enterprise to unite everyone, and safeguard the legitimate rights and interests of employees. We will earnestly fulfill our responsibility as a central SOE, and carry out targeted poverty alleviation to benefit the society and the people. We will promote win-win cooperation with all stakeholders to build a high-quality Ansteel.



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Feedback Form

Dear readers,

This is the eleventh sustainability report of Ansteel Group released to the public. We would like to solicit your opinions and suggestions so as to help us make constant improvement in our fulfillment of social responsibility and achieve sustainable development. We would highly appreciate it if you could spare some time to share your thoughts with us on the following issues:

revelopment. We would highly appreciate it if you could spare some time to share your thoughts with us on the following issues.						
I. Do you think this report reflects the significant impact that Ansteel Group has exerted on the economy, society and environment? (Please tick your option.)						
□ Yes	☐ Fairly	□ No				
2. Does this report make an exact and comprehensive analysis of the relationship between Ansteel Group and other stakeholders? Please tick your option.)						
☐ Yes	☐ Fairly	□ No				
3. Are the information, data and indexes disclosed in this report clear, accurate and complete? (Please tick your option.)						
☐ Yes	☐ Fairly	□ No				
4. Are the content layout and format design in this report helpful to your reading? (Please tick your option.)						
☐ Yes	☐ Fairly	□ No				
What makes the most satisfactory part of this report?						
s there any nece	ssary information or	mitted in this report?				
What are your opinions about our report on sustainable development to be released in the future?						

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Producing better material Creating more wonderful life



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