

# Beijing Shougang Co.,LTD

## Social Responsibility Report 2021

### Preface

#### I Definitions

The Company, Shougang, Shougang Co.	Beijing Shougang Company Limited
The Articles of Association	The Articles of Association of the Company
Qiangang Co.	ShougangQian'anIron&Steel Co., Ltd. (Branch of the Company)
Zhixin Co.	ShougangZhixinQian'an Electromagnetic Materials Co., Ltd. (Holdingsubsidiaries of the Company, holds 82.7688%)
Cold-R Co.	Beijing Shougang Cold Rolling Co., Ltd. (Holding subsidiary of the Company, holds 70.2806%)
New-E Co.	Beijing Shougang New Energy Automobile Material Technology Co., Ltd. (Holding subsidiary of the Company, holds 45.9184%)
Qian'an Metallurgical Co.	Qian'anShougang Metallurgical Technology Co., Ltd. (Wholly-owned subsidiaries of the Company)
Steel Trading Co.	Beijing Shougang Steel Trading Investment Management Co., Ltd. (Holding subsidiary of the Company, holds 51%)
QianshunProduction line	Forming an integrated production organization and product R & D system with Qiangang company located in Qian'an City, Hebei Province and cold rolling company located in Shunyi District, Beijing
Jingtang Co.	ShougangJingtang United Iron&Steel Co., Ltd. (Holding subsidiary of the Company, holds 70.1823%; Steel Trading Co., holds 29.8177%)
Reporting Period	From 1 January 2021 to 31 December 2021

#### II Scope of Report

This "Beijing Shougang Co., Ltd. Social Responsibility Report 2021" covers the performance of the Shougang Co. and its holding subsidiaries in 2021.

Note: This report is prepared based on the Chinese text and is prepared in both Chinese and English versions. In the event of any discrepancy between the Chinese and English versions, please subject to Chinese text.

## **Section I. Overview**

Shougang Co. was exclusively initiated by Shougang Corporation (renamed as Shougang Group in 2017), it was established by social fundraising and was listed on the Shenzhen Stock Exchange in December 1999. The Company's registered capital is RMB 6,750,325,410.

The theme of "scientific development", the main line of "accelerating the transformation of economic development mode", and the goal of "the first-class products, the first-class management, the first-class environment, the first-class benefits" have always been adhered by Shougang Co. The Company lays equal stress on social benefits, environmental protection and economic benefits, makes great efforts in energy efficient utilization, energy saving and emission reduction, insists on down-to-earth, fine and demanding attitude, strives to build a digital steel enterprise, and tries to build a world-class green steel company with employees, enterprises, society and environment for common development.

## **Section II. Protection of Shareholders' rights**

### **I . Corporate governance**

#### **1. Corporate governance framework**

Complying with the Company Law, the Securities Law, the Guidelines for the Governance of Listed Companies, the Stock Listing Rules of Shenzhen Stock Exchange and other relevant laws, regulations, and regulatory documents, the Company continues to deepen standardized operations, strengthen scientific governance, and create innovative and interactive communication channels, maintain good investor relationships, constantly improve the internal control system and the construction of a comprehensive risk management system, strictly fulfill the obligation of information disclosure, and effectively increase the quality of corporate governance operations. The Company has a corporate governance structure such as general meeting of shareholders, board of directors, board of supervisors and board of management. In 2021, the Company continues to improve its management system and organizational structure in accordance with market changes, operational productions and development needs. During the reporting period, the Company has 6 holding subsidiaries: Shougang Zhixin Qian'an Electromagnetic Material Co., Ltd., Shougang Jingtang United Iron & Steel Co., Ltd., Beijing Shougang Cold Rolling Co., Ltd., Beijing Shougang New Energy Automobile Material Technology Co., Ltd., Beijing Shougang Steel Trading Investment Management Co., Ltd., and Qian'an Shougang Metallurgical Technology Co., Ltd.

#### **2. Independence of the Company in terms of business, personnel, assets, institutions, finance, etc. relative to the controlling shareholders**

The Company and its controlling shareholders maintain completely independence in terms of business, personnel, assets, institutions, finance, etc. The Company has a complete procurement, production, marketing and operational management system, has a complete product research and development institutions and personnel, and also has the ability of independent production and operation.

### **II. General meeting**

In accordance with the Articles of Association and the Rules of Shareholders' General Meetings and other related regulations, the Company determines the time and place for the general meeting, and

issues notice for the shareholders' general meeting in accordance with regulations. The Company uses the methods of "on-site + online voting " to hold the general meeting of shareholders, to ensure that the matters submitted to the general meeting for consideration and approval are in compliance with the law and to ensure that shareholders, especially small and medium-sized shareholders can exercise their rights.

In 2021, the company held three general meetings of shareholders, and reviewed and approved 38 proposals such as The Report of the Board of Directors of Beijing Shougang Co., Ltd. in 2020, the Proposal of Beijing Shougang Co., Ltd. on the 2021 Restricted Stock Incentive Plan of Beijing Shougang Co., Ltd. (Revised Draft) and its abstract, the Proposal of Beijing Shougang Co., Ltd. on Amending the Articles of Association, the Proposal of Beijing Shougang Co., Ltd. on Meeting the Conditions of Issuing Shares to Purchase Assets and Raising Supporting Funds, and the Proposal of Beijing Shougang Co., Ltd. on the Report of Beijing Shougang Co., Ltd. on Issuing Shares to Purchase Assets and Raising Supporting Funds and Related Party Transactions (Revised Draft) and its abstract. The details of the general meeting of shareholders are as follows:

Sessions	Meeting type	Percentage of investor participation	Held Date	Disclosure Date	Show Index
2020 Annual General Meeting of Shareholders	AGM	77.0498%	29/6/2021	30/6/2021	China Securities Journal, Securities Times, Shanghai Securities News, Security Daily and CNINFO ( <a href="http://www.cninfo.com.cn">http://www.cninfo.com.cn</a> )
2021 First Extraordinary General Meeting of Shareholders	EGM	75.1881	29/11/2021	30/11/2021	China Securities Journal, Securities Times, Shanghai Securities News, Security Daily and CNINFO ( <a href="http://www.cninfo.com.cn">http://www.cninfo.com.cn</a> )
2021 Second Extraordinary General Meeting of Shareholders	EGM	81.9340%	20/12/2021	21/12/2021	China Securities Journal, Securities Times, Shanghai Securities News, Security Daily and CNINFO ( <a href="http://www.cninfo.com.cn">http://www.cninfo.com.cn</a> )

### III. Information disclosure

The Company performs its information disclosure obligations in accordance with relevant laws, regulations and regulatory documents, and the relevant provisions of the Shenzhen Stock Exchange. The Company establishes a normalized internal audit process for information disclosure, continuously improves the efficiency and quality of information disclosure, and ensures the truthfulness, accuracy, and completeness of information disclosure, and that there are no false records, misleading statements or major omissions. The Company should disclose information to investors in a timely and fair manner through the China Securities Journal, Shanghai Securities News, Securities Times, Security Daily and CNINFO.

In 2021, it completed 64 information disclosures and submitted 554 documents to Shenzhen Stock Exchange, including 304 public disclosure documents (including 116 Newspaper Announcements) and 250 filing documents, which is the year with the largest number of information disclosures over the years. The accuracy rate of information disclosure reached 100% throughout the year, and

there was no situation that needed to be corrected or supplemented. It won the grade "A" of information disclosure assessment of companies listed on the main board of Shenzhen Stock Exchange.

#### **IV. Profit distribution**

Since the establishment of the Company, it has always attached great importance to the return of shareholders, and maintained the legitimate rights and interests of all shareholders, especially small and medium-sized shareholders. According to various regulations and related requirements issued by the regulatory authorities, the Company promptly revises and improves the terms of the profit distribution policy in the Articles of Association, and strictly implements the approval procedures. The standard and proportion of the Company's cash dividend are clear and definite.

According to the profit distribution plan of Beijing Shougang Co., Ltd. approved at the first extraordinary general meeting of shareholders in 2021, the Company distributes cash dividends of RMB 1.0 (including tax) to all shareholders for every 10 shares based on the total number of 6,685,423,610.00 shares, with a total cash distribution of RMB 668,542,361.00, accounting for 74.91% of the distributable profits of the parent company in 2020. The capital reserve is not converted into share capital this time.

The 2021 profit distribution plan of the Company is as follows: after the audit of Grant Thornton LLP, the net profit of the parent company in 2021 is RMB 802,053,622.97, after deducting the 10% legal surplus reserve of RMB 80,205,362.30, the profit available for investors to distribute is RMB 721,848,260.67.

In view of the fact that the Company is currently promoting the issue of "issuing shares to purchase assets and raising supporting funds and related party transactions", according to the relevant provisions of the measures for the administration of securities issuance and underwriting of the CSRC, the Company is not going to make cash distribution or convert capital reserve into share capital this time.

The Company intends to review and arrange matters related to the profit distribution in 2021 in accordance with relevant laws, regulations, rules, normative documents and the articles of association as soon as possible after the implementation of the transaction.

The proposal is subject to the approval of the shareholders' meeting.

#### **V. Communication with investors**

In 2021, the Company has organized and held telephone conferences in terms of business performance of the 2020, the first quarter of 2021 and the first half year of 2021 to report the industry's development prospects, operation, production, and responded positively to the concerns of investors. At the same time, the Company also maintains communication with investors through the interactive trading platform of the Shenzhen Stock Exchange, the reception day for investors of listed companies in Beijing, and the daily telephone hotline to answer investors' consultations and other ways to maintain communication with investors, and answers investors' questions to

ensure good communication between the Company and investors.

## **Section III. Protection of Employee's Rights and Interests**

### **I. The protection of employees' interests**

The Company strictly implements the provisions of national and local laws, regulations and normative documents, pays social insurance for all employees under the requirement of laws and regulations. Through the establishment of a perfect system, the rights and interests of employees, such as labor protection, labor compensation, break and vacation, could be ensured. For internal retired employees, the Company adjusts the basic pension of enterprise retirees with reference to Beijing Municipal Human Resources and Social Security Bureau every year to ensure the stable life of the retirees. For the purpose of the Company's transformation and improvement of work efficiency, the Company sticks to the people-oriented principle, makes the use of the separation and resettlement of employees, ensures that the relocated employees have stable emotion and work, in order to realize the harmonious development of employees and enterprises, and maintains the social harmony and stability.

The Company strictly abides by the Labor Law, Labor Contract Law and other laws, regulations and normative documents, and strictly implements the national regulations and standards in terms of social security and labor rights and interests of employees. Firstly, according to the policies and regulations for the filing of labor relationships, the labor contract signing rate is up to 100% and there is no illegal employment; The second is to pay employee compensation in full and on time and pay social insurance in accordance with the regulations; Third is to strictly implement the national working hours system, and performs the approval procedures in accordance with the regulations; The last one is to strictly implement policies for special groups such as work-related injuries, non-work-related injuries, female workers (pregnancy, childbirth, lactation) and etc.

The Company strictly implements the Special Regulations on Labor Protection of Female Employees, Provisions on the Scope of Taboo Work for Female Employees and other provisions, as well as various provisions of the Company's regulations on the labor protection for female employees, so as to achieve gender equality in equal pay for equal work, vocational education, technical training, promotion, participation in democratic management of enterprises and other ways. Female employees are organized to participate in female health lectures and conducted special physical examinations, with a general survey rate reached 100%, which safeguarded the health and legal rights of female employees.

### **II. Safety production**

Qianshun production line and Zhixin Co. firmly established the safety concept of "people first and life first", comprehensively promoted the construction of double prevention mechanism and essential safety management, solidly carried out the three-year special rectification of national production safety, and continuously improved the ability of risk control. First, take safety responsibility as the core, implement the subject investigation mechanism, and give full play to the function of supervision and management. Second, under the guidance of consolidating basic

management, comprehensively revise the safety production responsibility system of all employees and optimize the occupational health management system. Third, with the goal of upgrading the dual prevention mechanism, promote the construction of risk online monitoring platform and comprehensively improve the information management and control ability of major risks. Fourth, comprehensively complete the three-year action of special rectification of work safety with the focus on in-depth promotion of special rectification and intrinsic safety; Fifth, focus on strengthening the management of relevant parties, and continue to strengthen the management of relevant parties with the main line of accountability, performance and due diligence; Sixth, take the innovation carrier and innovation form as the path, vigorously promote the massive training and precision training strategy, and build a precision training system; Seventh, under the guidance of establishing the root and soul of safety culture, deepen the construction of safety "home" culture and create a harmonious safety culture atmosphere; Eighth, take emergency rescue and emergency disposal as the guarantee, develop the intelligent management system of empty expiratory bottle, and improve the ability of emergency response.

Jingtang Co. insisted on moving the gateway forward, deepened the construction of essential safety management and "double control" mechanism, and effectively controlled safety risks. Create 94 areas for promoting essential safety management, 52 hidden dangers were treated at the source throughout the year, and 79 hidden dangers were formed in a prolonged period; Build an information-based intelligent platform for safety management, implement the main responsibility of safety production, and promote the gradual transformation of safety management to scientific management and independent management; Promote the implementation of safety day control, implement hierarchical control over high-risk operation projects, and always maintain a high-pressure situation; Comprehensively carry out the identification of fire risk factors, establish the risk control list of hot work, and improve the fire management system; Strengthen the safety management of relevant parties, supervise and improve the safety management system, and constantly build a strong line of defense for safety production.

### **III. Vocational training**

Qianshun production line and Zhixin Co. focus on the national and Beijing vocational skill improvement action plan, combined with the overall requirements of staff team construction, take quality improvement, ability training and talent appreciation as the core, focus on pertinence, practicability and value type, adhere to the combination of theory and practice, learning and summary, and establish a "long voyage" development system for the career of high potential talents in the whole life cycle. According to the positioning needs of talents at different levels such as training reserve, backbone, core, key and strategy, five levels of talent development and training projects of "wave, sail, sail, pilot and pilot" are designed to form a continuous and advanced map of high potential talent training and development, which is continuously promoted in stages and levels, and systematic talent training implementation projects are formulated according to the talent ability characteristics and growth factors at different stages, Effectively realize the unified guidance of three talent sequences and high potential talent training, and accelerate talent growth. More than 150 training projects were organized and completed throughout the year, enabling the full coverage of the three talent teams of operation and management, professional technology and skilled operation, further enhancing the cohesion of the enterprise and the centripetal force of the

staff, and providing strong support for the high-quality development of the Company.

Jingtang Co. has built a "four horizontal and three vertical" full staff training system to smooth the career development path of talents. Held a large lecture hall for leaders, rotation training classes for middle-level leaders and training classes for young backbone, and accelerate the improvement of the comprehensive quality of leaders and reserve backbone. Implement the "blue and blue project", select 148 pairs of mentors and apprentices to train children, give full play to the role of staff innovation studio, and build a platform for the growth of technical and skilled talents. Systematically carried out graded training for team leaders, and selected and commended 21 "gold medal team leaders". Adhere to the principle of "giving priority to internal training and supplemented by external employment" to build a team of teachers, established a closed-loop management mechanism for the selection, training and incentive of internal trainers, and excavate and cultivate a team of professional internal trainers. Given full play to the advantages of "three-level skill competition", continuously improved the competition system, established an independent recognition mechanism of vocational skills, 1635 people realize independent recognition, and the long-term mechanism for the rapid growth of employees is more perfect.

#### **IV. Workers union activities**

The Company conscientiously implemented all work requirements of the National Federation of Trade Unions, Beijing Federation of Trade Unions and Hebei Federation of Trade Unions, fully fulfilled the basic duties of the unions to safeguard the legitimate rights and interests of employees and serve the workers wholeheartedly. The Company insisted on taking serving the overall as the core, taking harmony as the goal, taking workers as the foundation, and focusing on the basic level, and has organized cultural and sports activities to enrich the cultural life of employees.

Focusing on celebrating the 100th anniversary of the founding of the party, Qianshun production line and Zhixin Co. unite and lead employees to listen to the party and follow the party, concentrate on the development of the company, carry out Shougang Employee Culture Festival, closely focus on the theme of the founding of the party and the cultural needs of employees, and design 29 cultural and sports activities including vigorous walking, singing competition, photography, calligraphy and painting, basketball league and so on from four dimensions and levels, so as to show the spiritual outlook of employees and release their vitality; Organize and carry out a series of activities such as Spring Festival, March 8th Festival, May 1st Festival and national day seven day music, and hold activities such as the unveiling ceremony of "Shougang calligraphy and Painting Association", vigorous walking competition, staff singing competition and so on; Organize to watch the large-scale scene song and dance epic "song of the striver" of the all China Federation; Take advantage of the "best friend of Shougang" App to participate in Shougang Group's "Celebrating the Centennial of the Founding of the Party" vigorous Walking Competition and Scholarly Shougang cultural activities, activate the cultural life of employees and further enhance the cohesion of the enterprise.

Jingtang Co. organized and carried out a series of activities such as the "11th Employee Culture Festival", held activities to celebrate the 100th anniversary of the founding of the Communist Party of China, the introduction of elegant art appreciation into Shougang Jingtang, summer family

time fun garden, red film screening and 2021 Steel City wedding photography, and held 2021 swimming training class, employee fishing competition, employee sports meeting, football and badminton league, focusing on the construction of employee culture, Promote the improvement of employees' quality and stimulate the vitality of enterprises.; Organize the third intensive training class for resident lecturers of "soul post station", promote the construction of the company's soul post station site, add 10 sets of experience and testing equipment of soul post station, build 180 heartwarming post stations for grass-roots organizations, and the application project won the "psychological service boost project for excellent employees of Beijing" of Beijing Federation of trade unions; Innovative development and operation of "warm heart Jingtang" App, through which employees can exchange birthday greetings online, inquire about policies, participate in online fun activities, and narrow the distance between employees through the network, so as to make the trade union a "home for employees" with all-weather and full coverage, and a "family" with zero distance and close heart to employees

## **Section IV. Honest Operation, Protection of Suppliers' and Customers' Rights and Interests**

### **I. Operating in good faith according to law**

Qianshun production line strictly implements the job rotation management system for personnel with business disposal rights, checks risks against business process and risk positions, formulates preventive measures and incorporates them into the system, tightens and fastens the "cage" of the system. Combining institutional adjustments and business changes, the Company reorganizes the risk symptom in the business process, optimizes rights-related matters and risk management and control measures, and tightens the "cage" of the system. In addition, the Company strengthens the supervision of leaders to ensure integrity in their professions, broadens the content and methods of anti-corruption education, and strengthens the ideological defense of party members and cadres by holding warning education conferences, anti-corruption co-construction conferences, special lectures, visits and exchanges, and preparation of "discipline based on cases" materials. It organized the theme culture month of "Incorruption culture in the heart, the breeze is full of shares". Various forms of integrity education activities are carried out, and the integrity concept of "cleanness and officialdom, diligence and integrity as a whole" is created. The atmosphere of "everyone thinks about integrity, everyone promotes integrity and everyone protects integrity" is created as well.

To Qianshun production line and Zhixin Co., the first is to strengthen the supervision of leaders. Hold a warning education conference, hold a warning education training course for clean employment in 2021, have a collective conversation with the new leaders, and conduct pre Festival interview reminder conversation and integrity and self-discipline education conversation with key personnel according to the authority in charge, so as to play the role of warning education. Second, compile warning cases of "using cases to say discipline" and incorporate them into the "three meetings and one lesson" study of grass-roots party branches; Strengthen the risk prevention and control management of clean government. Comprehensively sort out and investigate the integrity risk points of the supervision objects and business processes of each unit, find the business risk points, formulate prevention and control measures, and rotate the positions

of the personnel with business disposal rights, so as to make the prevention and control of the supervision objects focus on control and control. Third, organize all units to establish anti-corruption archives of key supervision objects in batches, so as to provide reference for subsequent leaders to implement the responsibility system for building a clean and honest government and the assessment and evaluation of integrity and self-discipline; Fourth, carry out the construction of clean culture, hold the second clean culture month, establish a clean culture column, create a clean culture corridor, organize family affection to help clean, hold a clean knowledge competition, issue a notice letter to suppliers on co-construction of clean and honest, and participate in the collection of family style works of "Clean Beijing · Clean family" in Beijing, so as to form a strong atmosphere of jointly creating a clean culture.

Jingtang Co. conscientiously implements the requirements of the anti-fraud system of the Company, strengthens anti-corruption education, cultivates the integrity concept of "integrity in mind and integrity in practice", builds the integrity education matrix of "Jingtang integrity", eliminates commercial bribery and protects the rights and interests of shareholders, suppliers, customers and consumers. Strengthen the risk identification and prediction of clean government, and strengthen the prevention and control at the source in combination with the optimization of rules and regulations of Jingtang company. Investigate the current situation of aircraft side warehouse management, promote the full use of information management means, strengthen "technical defense" and "civil air defense", and reduce the risk of clean government. Focus on "adhering to the red line of professional ethics", divide the risk level of personnel in positions with business disposal power, promote exchange and job rotation, and avoid the risk of integrity. Deepen the warning education of "taking cases as lessons and promoting reform with cases", enrich the carrier of "integrity" discipline education, and deepen the quality and efficiency of "Pro integrity" families. Strengthen the clean co-construction with relevant parties and service management objects, sign co-construction agreements, issue notices, carry out questionnaire survey on clean practitioners, visit key co-construction units, jointly carry out warning education, and build a solid foundation for cooperation with relevant parties.

## **II. Protection of suppliers' and clients' rights and interests**

### **1. Protection of suppliers' rights and interests**

To Qianshun production lian and Zhixin Co., the first is to implement the Management Measures for Purchasing Suppliers, aiming at establishing an honest, high-quality, stable and sustainable competitive supply chain system, adhere to the principles of equality, win-win and development, and strengthen supplier evaluation. Second, establish a "Enterprise Procurement Specification Promotion Scheme ", and standardize the procurement mode, optimize the business process, online review and online procurement of the judges, and promote the online bidding of the supplier system. Promote the online quotation of supplier system and the electronic signing and sealing of procurement contract, promote the enthusiasm of suppliers, avoid cumbersome document transmission and improve procurement efficiency. Third, in combination with IATF16949 system certification, aiming at the quality of functional materials and materials reflected by each base, formulate Work Plan and Arrangement for Two-party Audit of Functional Materials and Spare Parts, strengthen the quality source control, and promote the synchronous development of suppliers and the company. Fourth, in order to develop circular economy and

low-carbon economy, formulating Work Plan for Green Procurement, issuing the Proposal for Green Procurement to Suppliers and the Questionnaire on Suppliers' Environmental System, encouraging suppliers to implement environmental management system certification, and strive to achieve more environmentally friendly and low-carbon procurement varieties. Five, formulate an anti-corruption education and training plan, take "zero violation of discipline by Party members" as the goal, carry out in-depth anti-corruption education activities of "reading laws and regulations, learning cases and talking about experience", and further consolidate the ideological defense line of Honest Employment of Party members, cadres and personnel with business disposal power. Continue to implement the eight provisions of the central government and supervise and inspect official vehicles, office space, official reception, weddings and funerals. 88 anti-corruption risk points were sorted out, 122 measures were formulated, and a "letter of integrity notification" was issued to suppliers. On holidays, the boot of incoming suppliers' vehicles was supervised and inspected, and special rectification activities such as "two special rectification", violation of the eight provisions of the central government and "rely on enterprises and hurt on enterprises" were carried out, creating a clean and positive procurement atmosphere.

## **2. Protection of clients' rights and interests**

The Company adheres to the orientation of meeting the needs of users, creates service advantages by focusing on value creation, and firmly maintains the market reputation and brand image of Shougang products. Pay attention to the needs and demands of customers, give play to the synergy of the system, and improve the strength and level of customer service; Strengthen the practical application of service management evaluation results such as product competitiveness analysis model and accurate identification of customer needs, maximize the service value and improve the service core competitiveness of Shougang. Effectively meet the personalized needs of customers. Pay attention to the quality needs of customers, continue to strengthen the role of front-line service, mobilize production lines and R & D resources, quickly solve product quality problems and improve user experience. Pay attention to customers' price demands, and improve users' stickiness by improving supporting supply capacity, improving quality stability, improving delivery cycle, reducing logistics costs, reasonable pricing and other measures. Respond to customer demands in a timely manner, with 967 closed-loop customer demands throughout the year, with a closed-loop rate of 99%; We continuously improved the coordination mechanism of "list of problems - listing supervision - internal tackling", tracked 30 problems and included 20 problems in the supervision.

In 2021, it has successively won 10 awards, including the "sincere partner Award" of Great Wall Motor, the "excellent supplier" of CIMC and Dongfeng Honda, and the "win-win cooperation Award" of BAIC Futian. The hot-rolled high-strength wheel steel has won the "product development and market development award of China's iron and steel industry" for the first time. The market recognition of Shougang Co. products and Shougang Co services continued to improve.

The Company insists on fair cooperation with customers in accordance with the requirements of clean government construction, ensures legal and compliance, carries out marketing work, strengthens clean government risk prevention and management, and signs a clean government co construction agreement with customers and carrier fleets throughout the year. Improve the

prevention mechanism and promote the integrity of all employees. Based on the principle of horizontal to post and vertical to business, the risk prevention and control manual of the marketing center has been revised again, forming a clean government risk prevention and control management system with marketing characteristics. Re approved the personnel with business disposal authority in the marketing center, improved the management account, regularly tracked the working years of the personnel with business disposal authority, and supervised the rotation of posts to ensure that they should be transferred. The Company has carried out the establishment of integrity archives for key marketing supervision objects, and filed all supervision objects.

### **III. Product quality responsibility**

Qianshun production line and Zhixin Co., combine the characteristics of "long-term, arduous and important" of quality work to continuously create a quality culture and improve the quality awareness of all employees. Taking the "year of improving quality and efficiency" as an opportunity and focusing on promoting the quality management work of "taking reducing spot goods as the main line, tackling key problems in the" double ten "as the starting point, and consolidating the quality control ability of the consistent process". In 2021, taking the spot incidence rate as the starting point, the Company comprehensively sorted out 91 weak links and bottlenecks in management and technical quality problems. Through tackling key problems, the annual spot incidence rate was 9.54%, 0.46 percentage points lower than the target. Organize and promote the tackling of "double ten" problems on a weekly basis. The 16 projects represented by "tackling key problems of weather resistant thin plate shape" have reached the expected goal, and the compliance rate is 80%. By strengthening the tracking and inspection mechanism of quality inspection, weekly Kanban and monthly regular meeting, the process control ability was improved. A total of 381 quality inspections were carried out throughout the year, and 62 potential quality problems were found. Supervise and implement the Kanban meeting, arrange 10 key tasks, and promote the solution and breakthrough of key problems such as "tackling the quality of silicon steel tension straightening and edge cutting" and "tackling the problem of tower defects". Promote the whole process loss reduction, focusing on the four dimensions of repair, spot, quality objection and waste loss to achieve the annual loss reduction goal.

Jingtang Co., strengthened the full caliber and whole process quality management, improved the ability of quality planning and quality control, and the annual waste reduction rate decreased by 1.34 percentage points year-on-year. The project mode of "picking and listing" was implemented, 95 quality problems were tackled, the completion rate reached 86%, and the hit rate of the whole process of O5 board increased by 8.6 percentage points year-on-year. Improve the evaluation system of 41 indicators of 9 interfaces in the whole process, optimize the disposal process of 13 types of abnormal problems, further standardize the interface process management, and increase the overall progress rate of interface indicators by 15.9%. Continued to promote SPC process control and set up 407 key control points in the main process of iron-steel-rolling. The process capacity of  $CPK \geq 1.0$  increased by 19.1 percentage points year-on-year, and the effect of systematization and refinement of quality management was more remarkable.

## **Section V. Environmental Protection and Green Development**

In accordance with the Clean Production Promotion Law and other laws and regulations, as well as

local government regulations and regulatory documents, the Company has established a perfect professional management organization and environmental protection management system, adheres to the long-term mechanism of environmental protection and green development, strictly abides by various laws and regulations related to environmental protection, improves professional management system, job operating procedures and operating records of environmental protection facilities, and ensures the environmental protection facilities operate efficiently. Qiangang Co. and Jingtang Co. continue to maintain the "A-level" enterprise of environmental protection performance evaluation in Hebei Province. Qiangang Co. exported ultra-low emission advanced technology and management experience, and served more than 30 iron and steel enterprises in total. CCTV news network, Xinhua News Agency and Phoenix Satellite TV respectively praised the green and low-carbon transformation and development of Shougang Co.

During the reporting period, all pollutants were discharged in compliance with the standards, with the completion rate of 100% for the total amount of pollutants and 100% for the environmental protection of pollutants. The synchronous operation rate of environmental protection equipment is 100%. The Company has no major environmental protection or other major social safety problems.

## **I. Emissions of pollutants**

The pollutants produced by the Company have all organized and meet the standard emissions. For the detailed emissions in 2021, please refer to the attached table.

## **II. Construction and operation of pollution prevention facilities**

Qiangang Co., strengthened the level of environmental protection governance, led the industry, maintained the sustainability of environmental governance, and continued to promote the green action plan for the iron and steel sector based on the ultra-low emission and performance class A basic platform. In 2021, Qiangang Co., started 52 environmental protection special treatment projects, established a project leading group, held regular project promotion meetings regularly, coordinated and solved existing problems and promoted the progress of green projects. By the end of the reporting period, 48 items had been completed, and the remaining 4 items continued to be implemented.

Through a series of measures such as improving the environmental protection management system, adhering to daily inspection and implementing problem rectification, the Company has continuously strengthened the control of environmental protection facilities and daily production operation, and the environmental protection facilities and production facilities operate synchronously and stably. Strengthen the maintenance management of environmental protection facilities, and conduct simultaneous maintenance of environmental protection facilities such as desulfurization and denitration, dust removal and wastewater treatment with the main production facilities. Through self-monitoring and supervision and monitoring by the environmental protection department, 100% of all pollutants are discharged up to the standard.

Jingtang Co., has built 225 sets of waste gas treatment facilities such as dust removal, desulfurization and denitration to effectively treat all kinds of waste gas. The dust adopts bag dust

removal, plastic burning plate dust removal, electric dust removal and other methods; Coke oven flue gas adopts ammonia desulfurization + medium and low temperature SCR denitration process; Sintering and pelletizing adopt circulating fluidized bed desulfurization + medium and low temperature SCR denitration process; Seawater desulfurization + SCR denitration process is adopted for desulfurization of self-owned power plant. A total of 12 sets of main wastewater treatment facilities is built. It includes coking phenol cyanogen wastewater treatment system, continuous casting wastewater treatment system, hot rolling, cold rolling, medium and heavy plate, steel rolling wastewater treatment system and comprehensive wastewater treatment station. After treatment, the clean water is mixed with rich seawater desalination water for reuse to realize coupled zero discharge of wastewater. A total of five types of solid waste treatment facilities, briquette comprehensive utilization facilities and 6 ×600000 ton / p.a. slag fine grinding cement production line is built, converting the blast furnace slag of iron and steel plant into high-quality cement raw materials by adopting new processing technology; Dust removal ash and iron oxide scale from raw materials, ironmaking, hot rolling and other processes are returned to sintering ingredients for utilization. At present, all environmental protection facilities of JingtangCo., operate well, and all processes in the whole process meet ultra-low emission standards.

The Cold-R Co., builds annealing furnace and gas-fired boiler with natural gas as fuel to reduce waste gas pollution from the source. 11 sets of waste gas treatment facilities including oil mist purification system, acid mist purification system, bag dust removal system and alkali mist treatment system is built, and all waste gas was discharged up to standard; 1 wastewater station was built to discharge all wastewater up to standard after treatment through four systems: acid containing wastewater treatment, dilute alkali wastewater treatment, oil-bearing and finishing liquid wastewater treatment. By selecting low-noise equipment and taking vibration reduction measures, effectively do a good job in noise prevention and control, and install silencers at the discharge of iron oxide powder bin; The air compressor, booster, nitrogen compressor and other equipment were set in the plant, and the sound insulation cover was set. The silencing tower was built at the outlet of the nitrogen generating unit. The above environmental protection facilities operate well, and all pollutants are discharged up to the standard.

By upgrading the oil mist removal system of acid rolling, Zhixin Co., has solved the problem of oil mist overflow and insufficient flue height; The construction of high-efficiency car washing station has effectively reduced the atmospheric dust pollution in the plant; In order to avoid the problems such as the open-air stacking of bagged iron red, the displacement of iron red and the scattering of iron red caused by the damage of iron red bag during hoisting, a rain proof shed for iron red storage under closed storage and hoisting and loading conditions has been built. All the existing environmental protection facilities of the Company operate stably, and the pollutants are discharged up to the standard.

### **III. Construction of environmental impact assessment of projects and other environmental protection administrative permits**

In order to further implement energy conservation and emission reduction as well as enhance the corporate environmental image, the Company invested various projects such as Qiangang

Co.Dust-removing Environmental Management Project and Qiangang Co.Whitening Water and Exhausted Steam for Blast Furnace Slag Project, which have been registered on the registration form of construction project environmental impacts. In September 2017, the Company obtained a new version of the sewage permit issued by the Tangshan Environmental Protection Bureau. In August 2020, the extension of the pollution discharge permit was completed, and the validity period was extended to 2025.

Jingtang Co. adheres to the equally importance principle of production development and environmental protection, evaluates the environmental impact assessment project strictly in accordance with the Environment Impact Assessment Act of China, constructs strictly in accordance with the EIA approval during the implementation of the project. All construction projects are supported by construction of environmental protection facilities, to meet the “Three Simultaneous” management requirements for environmental protection. In April 2006, the Company obtained the environmental impact assessment approval from the Ministry of Environmental Protection (formerly the State Environmental Protection Administration)(State Environmental Assessment [2006] No. 181). In May 2010, it obtained the approval of the Ministry of Environmental Protection to change the environmental impact assessment (State Environmental Assessment [2010] No. 11). In January 2012, it obtained the trial production approval from Hebei Provincial Environmental Protection Department (Hubei Environmental Assessment [2012] No. 17). In January 2014, it obtained the environmental protection acceptance approval for the completion of the first phase of the Ministry of Environmental Protection (State Environmental Assessment [2014] No. 4). In December 2014, it obtained a pollutant emission permit issued by the Hebei Provincial Environmental Protection Department. In October 2015, it obtained the environmental impact assessment approval for the second phase of the Hebei Provincial Department of Environmental Protection (Hebei Environmental Assessment [2015] No. 359). In August 2017, the Company obtained a new version of the pollution discharge permit issued by the Tangshan Environmental Protection Bureau; it combined with the second-stage one-step construction project, the pollutant discharge permit was changed in April 2019, and the sewage outlet of the second-stage one-step project was included in standardized management. In April 2019, the Reply Letter on the Opinions on the Changes of the One Step of the Second Phase of Jingtang Co. (Hebei Environmental Assessment Letter [2019]No.465) was obtained from Hebei Provincial Department of Ecology and Environment. In April 2019, the certificate of pollutant discharge permit change was completed, and the sewage outlets of phase II one-step project was included in standardized management. The environmental protection acceptance of phase II one-step project was completed in October 2020. The extension of the pollutant discharge permit has been completed in August 2020, and the validity period was extended to 2025.

In October 2017, Cold-R Co. is the first company that obtained the pollution discharge permit in Shunyi District, Beijing. In September 2020, it submitted an application for renewal of the pollution discharge permit in accordance with relevant regulations. It passed the government review at the end of October and the validity period was extended to 2025.

Zhixin Co. completed the environmental impact assessment of the High Performance Oriented-steel Project of Shougang Zhixin Qian'an Electromagnetic Material Co., Ltd. in 2021. The

pollutant discharge permit was obtained according to law in July 2018, and the modification and extension of the pollutant discharge permit were completed in July 2021.

#### **IV. Emergency plans for environmental emergencies**

In accordance with the Environmental Protection Law of the People's Republic of China and other laws and regulations and normative documents, Qiangang Co. has formulated the Emergency Plan for Environmental Emergencies. The plan focuses on strengthening the daily management and safety prevention of production, strictly prevents all kinds of sudden environmental events, regulates and strengthens the abilities to deal with environmental emergencies, focuses on preventing the occurrence of sudden environmental events, gradually improves the mechanism of early warning, disposal and rehabilitation of environmental emergencies, and establishes the Company's emergency disposal system, which would be strong, orderly, efficient, unified and coordinated, for emergency environmental emergencies. On this basis, Qiangang Co. also formulated three special plans, namely Sudden Environmental Event Emergency Plan Special for Atmospheric, Sudden Environmental Event Emergency Plan Special for Water and Sudden Emergency Plan for Hazardous Wastes in Environmental Incidents, to further improve the air pollution and water pollution emergency response capacities.

According to the requirements of the Emergency Treatment Plan for Environmental Emergencies (Third Edition), Jingtang Co. identifies gas storage tanks, pipelines and benzene tanks, acid storage tanks, liquid ammonia storage tanks and other dangerous chemicals and toxic and harmful substances production, storage areas as dangerous target for emergency rescue. In accordance with the requirements of the Emergency Response Plan for Environmental Emergencies of ShougangJingtang United Iron & Steel Co., Ltd. (Third Edition), 24 emergency drills were carried out in 2021, including waste oil leakage, radioactive source leakage emergency drills, waste water exceeding the standard, waste acid leakage, wharf ship offshore oil spill emergency drills, so as to ensure the effective implementation of rescue in accordance with the requirements of the Plan and improve the skills of preventing and dealing with sudden environmental pollution accidents and the actual combat capability.

According to relevant laws and regulations, Cold-R Co., formulated a new version of Emergency Plan for Environmental Emergencies and put it on record. According to the requirements of the Plan, Cold-R Co., organized and carried out the plan drill, timely rectify the problems found in the drill, and enhanced the emergency response ability of environmental emergencies.

Zhixin Co. organized the preparation of Emergency Plan for Environmental Emergencies (version 2021) and complete the filing. In addition, organized all units to carry out 12 emergency drills for environmental emergencies throughout the year, covering water, gas, sound, slag, radiation and other projects.

#### **V. Environmental self-monitoring program**

In accordance with the relevant provisions of the National Key Monitoring Enterprises Self-Monitoring and Information Disclosure Measures (Trial) and National Key Monitoring Enterprises Pollution Source Supervision and Information Disclosure Measures (Trial) and other

relevant regulations, Qiangang Co. establishes and improves the pollution source monitoring and information disclosure system, formulates the Pollutant Emission Monitoring Plan 2021 and strictly implements it. In 2021, 1380 monitoring of PM, flue gas, air quality, plant boundary noise, etc. are organized and completed as planned. The monitoring results showed that 100% of the pollutants are up to the standard.

The environmental monitoring system of Jingtang Co. consists of two parts: automatic monitoring and manual monitoring. The manual monitoring system entrusts a qualified third-party testing organization to regularly monitor the environment of waste gas, waste water, noise, radioactive sources and other items of pollution sources in the plant according to the Annual Self-monitoring Plan for Key Monitoring Enterprises, so as to form monitoring data and reports. The annual monitoring plan for 2021 has been completed, and all environmental protection control indicators have reached the standard normally.

Cold-R Co., formulated self-monitoring plan according to the requirements of pollutant discharge permit, and supervise and test each discharge point on a daily, monthly and quarterly basis. In 2021, the company's emission indicators of pollution sources will all meet the standards.

In accordance with the requirements of relevant national regulations, Zhixin Co., formulated the Self-Monitoring Plan for 2021, strengthen internal control, and entrust a qualified third-party monitoring organization to monitor according to the monitoring plan and plan every week, month and quarter. Through the development of intelligent application software, locate the monitoring points, achieve real-time monitoring and real-time data management, and ensure the discharge of pollutants up to the standard.

## **VI. Administrative penalties for environmental problems during the reporting period**

There is no administrative penalty for environmental problems during the reporting period.

## **VII. Other environmental information that should be disclosed**

On the basis of adhering to the environmental protection work, Qiangang Co., Jingtang Co., Cold-R Co., and Zhixin Co. use the national key monitoring enterprises' self-monitoring information disclosure platform, website of government environmental protection department and self-established information disclosure platform, to publicize and display the environmental protection projects, operation of environmental protection facilities, names and emissions of major pollution sources, monitoring methods, monitoring indicator names, solid waste comprehensive utilization, etc. and actively accepts social supervision.

## **VIII. Other environmental related information**

In order to develop circular economy and low-carbon economy, build resource-saving, environment-friendly and low-carbon oriented company, and also achieve a good and rapid development of the Company, Shougang Co. launched the preparation of environmental responsibility report at the end of 2016. The scope of the environmental responsibility report

includes Qiangang Co., Jingtang Co., Cold-R Co., and other subsidiaries. In April 2020, the 2020 Environmental Responsibility Report of Beijing Shougang Co., Ltd. was released on the website of Shougang Co. (<http://www.sggf.com.cn>).

During the reporting period, the Company and its subsidiaries have not been punished by any regulator in aspect of environmental protection. Meanwhile, the Company supervising and urging related shareholding companies to operates in an environmentally friendly way and in compliance with the Law of the People's Republic of China on Environmental Protection and other related laws, regulations, rules and normative documents.

## **Section VI. Public Relations and Social Welfare**

Based on the development of the enterprise, the company actively repay the society, carry forward the volunteer spirit of "dedication, fraternity, mutual assistance and progress", earnestly fulfill the responsibility of social assistance, and actively do a good job in social public welfare undertakings.

### **I. Volunteer services**

Qianshun production line and Zhixin Co. improve the framework of "league organization + volunteer service team" and build a brand volunteer service team. First, in the voluntary service of epidemic prevention and control, we should interpret the responsibility of young people with actions. Go deep into the plant area, go into the community, widely mobilize young League members to actively participate in epidemic prevention and control, organize "Little Red Cap" young volunteers to go into the front line of epidemic prevention, and continue to carry out nucleic acid testing, vaccination, community duty and other epidemic prevention volunteer services. More than 3000 people participated, with a total of more than 200000 service people. Second, actively practice the spirit of volunteerism. Organize young workers to participate in the basic ability improvement training of Beijing Emergency volunteer team, and select excellent young people to participate in urban volunteer services for 2022 Beijing Winter Olympic Games and winter Paralympic Games, volunteer services at the torch relay point of Shougang Park, China International Trade in services fair and other major national activities and volunteer service activities in important places, so as to win recognition with the highest standard and best service. Third, we continued to carry out the volunteer service of "Chairman Mao Memorial Hall" and the theme volunteer activity of "learning from Lei Feng", with a cumulative number of participants exceeding 200.

JingtangCo.established a youth volunteer service team to contribute to the service guarantee of large-scale activities and show its youth in a number of "urgent, difficult, dangerous and heavy" tasks. During the epidemic period, young volunteers rushed to the forefront of epidemic prevention and control. They participated in the publicity of disease prevention knowledge, personnel information investigation, staff temperature detection, public area killing and so on, and participated in more than 400 people. With the Publicity Department of Caofeidian district Party committee (Civilization Office) and Caofeidian District Volunteer Association, we held environmental protection public welfare activities in Caofeidian Forest Park to clean up garbage in public areas, create a civilized living environment, publicize the concept of green environmental

protection and improve the environmental protection awareness of the general public. In many large-scale activities such as Chairman Mao Memorial Hall and Beijing Service Trade Fair, young volunteers of Jingtang actively participated, were willing to contribute, and completed their tasks with careful and thoughtful service and high quality. Zhang mengyan, a volunteer of JingtangCo., appeared on "Worker's Daily" on behalf of Shougang youth.

## **II. Donations with love**

Qianshun production line and ZhixinCo. continue to gather people's hearts and warm people's hearts. (1) Organized the "love offering" fund-raising activities, with a total donation of RMB 400.15 thousand; (2) People oriented, visited and expressed condolences to more than 1250 people, including workers in difficulty, injured workers, model workers and veterans; Condolences to the front-line production workers and public security policemen who stick to their posts during the Spring Festival; Distribute warm sympathy packages to more than thousands of employees who have been relocated for the new year; Send warm service packages to more than 150 model workers at all levels; (3) Hold summer nursery care classes, communicate and coordinate to solve the enrollment of employees' children, and solve the worries of employees; (4) Organize and carry out physical examination of all staff, birthday condolences and staff treatment and rest; Condolences to more than 1000 married, childbearing and retired workers.

JingtangCo. continued to gather people's hearts and warm people's hearts. (1) organized "love giving" fund-raising activities, with a total donation of RMB455 thousand; (2) During the two festivals, warm activities were organized to go deep into the homes of model workers, advanced backbones and difficult workers to express condolences to 984 workers, with a consolation amount of RMB650 thousand; RMB 2.8061 million of relief fund was paid to employees in difficulty; (3) Carry out "Spring Festival" and birthday greetings for all staff; Condolences to nearly 1000 married, childbearing and retired workers.

## **III. Energy saving and emission reduction**

QiangangCo. actively responded to the national energy conservation and emission reduction policy by using the waste heat of blast furnace slag flushing water to provide heating for 1,319,400 square meters in the plant area and local schools, hospitals and communities, replacing the original coal-fired boiler for heating, reducing the emission of pollutants such as CO<sub>2</sub> and SO<sub>2</sub>, and helping to defend the blue sky.

## **IV. Consolidate and expand the achievements in poverty alleviation and rural revitalization**

The Company has actively fulfilled social responsibilities, expand the achievements of poverty alleviation, implement consumption poverty alleviation, and help rural revitalization. Purchase agricultural products such as potatoes in Yangyuan County, Zhangjiakou City, Hebei Province, and sets of jujube, raisins and other poverty alleviation products in Xinjiang, with a total amount of RMB 1.3768 million.

## **Conclusion**

In 2022, Shougang Co. will adhere to the concept of "people-oriented, honest operation, efficient development, mutual benefit and win-win, dedication to the society", and always obey to walking with the times, customers, shareholders and employees, and strive to build a new generation of metallurgical demonstration enterprise of "circular economy, energy saving and environmental protection, clean and high efficiency", and attempt to maximize the interests of all parties in business activities, and take it from the society, dedicate it to the society, actively fulfill social responsibilities and help build a harmonious society.

Beijing Shougang Co., Ltd.  
27 April 2022

### Shougang Co. 2021 Annual Pollutant Emission

Name of the company or subsidiary	Names of major pollutants and characteristic contaminants	Emission method	Number of drains	Distribution of emission drains	Emission concentration	Implemented pollutant emission standards	Total emissions (tons)	Total approved emissions (tons)	Exceed the standard or not
QiangangCo.	COD (Chemical Oxygen Demand)	Discharge to rivers and lakes after treatment	1	Total wastewater discharge port of the Company	1-5mg/L	50mg/L	0.6	648.99	No
QiangangCo.	Ammonia Nitrogen	Discharge to rivers and lakes after treatment	1	Total wastewater discharge port of the Company	0.05-1mg/L	5mg/L	0.02	64.899	No
QiangangCo.	Sulfur Dioxide	Organized	69	Energy, Ironmaking, Steelmaking, Hot Roll, Roll.	0-20mg/m3	Energy, Ironmaking, Steelmaking, Hot Roll 35mg/m3 , Cold Roll 50mg/m3	849.2	926.402	No
QiangangCo.	Nitrogen Oxides	Organized	69	Energy, Ironmaking, Steelmaking, Hot Roll, Roll.	5~35mg/m3	Energy, Ironmaking, Steelmaking, Hot Roll 50mg/m3 , Cold Roll 150mg/m3	1129.1	2220.565	No
QiangangCo.	Particulate Matter	Organized	153	Energy, Ironmaking, Steelmaking, Hot Roll, Roll.	1-3mg/m3	Energy, Ironmaking 5mg/m3 Steelmaking, Hot Roll, Cold Roll 10mg/m3	1356.7	1414.607	No

Jingtang Co.	Sulfur Dioxide	Organized	42	Coke oven chimney, coke pushing, coke outlet, CDQ outlet, outlet of baghouse system after desulphurization of sintering machine, outlet of hot blast stove of no.1 and no.2 bf, lime kiln roasting, heat treatment furnace, 2 × 300mw generating units chimney exit, gas boiler chimney exit.	Coke oven chimney :<10 mg/m3; Coke pushing :<30 mg/m3、Coke outlet :<70 mg/m3; CDQ outlet :<80 mg/m3; Sintering desulfurization:<30 mg/m3; Lime kiln roasting: < 50 mg/m3; Heat treatment furnace:<50 mg/m3; Coal-fired and gas-fired generating units:<20 mg/m3.	Coke oven chimney:30 mg/m3;Coke pushing: 30 mg/m3、Coke outlet:70 mg/m3; CDQ outlet: 80 mg/m3; Sintering desulfurization: 35 mg/m3; Hot blast stove: 50mg/m3; Lime kiln roasting: 35 mg/m3; Cold rolled furnace: 50 mg/m3; Annealing furnace for continuous annealing unit and hot-dip galvanizing unit: 50 mg/m3; Coal-fired and gas-fired generating units: 35mg/m3; Gas boiler: 50 mg/m3	1140.70	2965.74	No
Jingtang Co.	Nitrogen Oxides	Organized	38	Coke oven chimney, outlet of baghouse system after desulphurization of sintering machine, outlet of hot blast stove of no.1 and no.2 bf, lime kiln roasting, heat treatment furnace, 2 × 300mw generating units chimney exit, gas boiler chimney exit.	Coke oven chimney :<100 mg/m3; Sintering desulfurization :<50mg/m3; Outlet of hot blast stove of No.1 and No.2 BF :<150mg/m3; Continuous annealing line of cold rolling mill and hot rolling mill, annealing furnace of HDG line :<150 mg/m3; Coal-fired and gas-fired generating units :<40 mg/m3.	Coke oven chimney :130mg/m3; Sintering desulfurization :50 mg/m3; Outlet of hot blast stove of No.1 and No.2 BF、heating furnace of hot rolling mill、continuous annealing line、annealing furnace of HDG line、Roasting device of waste acid regeneration station:150mg/m3; Lime kiln roasting: 150 mg/m3; Coal-fired and gas-fired generating units:50 mg/m3; Gas boiler:150 mg/m3	3533.23	6379.92	No

Jingtang Co.	Particulate Matter	Organized	176	Coke pushing, coke outlet, CDQ outlet, coke oven chimney, dust removal outlet of stock ground transfer station, dust removal outlet of sintering machine batching, crushing, finished products screening, dust removal outlet of sintering machine tail and ring cooler, dust removal outlet of primary flue gas of bf tapping field, secondary flue gas of bf tapping field, dust removal outlet below the blast furnace bunker, dust removal outlet of cast iron machine, dust removal outlet of blast furnace pulverized coal production, dust removal outlet of hot blast stove of bf, steelmaking electric dust removal, steelmaking secondary dedusting outlet, dust removal outlet of flame descaling, lime kiln top dust collector outlet, heat treatment furnace, dust removal of finishing mill, dust removal exit of tension leveler and welder of PLTCM, dust removal exit of iron powder warehouse, 2 × 300mw generating units chimney exit, gas boiler chimney exit.	Coke pushing, Coke outlet, CDQ outlet, Coke oven chimney:<10 mg/m3; The transfer point of stock ground:<10 mg/m3; Sintering machine batching, crushing, finished products screening, sintering machine tail and ring cooler:<10 mg/m3; primary flue gas and Secondary flue gas of BF tapping field:<10 mg/m3; Below the blast furnace bunker, cast iron machine, blast furnace pulverized coal production, hot blast stove of BF:<10mg/m3; Steelmaking electric dust removal: <20mg/m3; Steelmaking secondary dedusting, flame descaling, Lime kiln top dust collector:<10mg/m3; Heat treatment furnace, finishing mill, tension leveler and welder of PLTCM:<10 mg/m3; Iron powder warehouse:<10mg/m3; Coal-fired and gas-fired generating units:<10 mg/m3.	Coke pushing, Coke outlet, CDQ outlet, Coke oven chimney:10 mg/m3; The transfer point of stock ground:10mg/m3; Sintering machine batching, crushing, finished products screening, sintering machine tail and ring cooler :10mg/m3; Primary flue gas and Secondary flue gas of BF tapping field:10 mg/m3; Below the blast furnace bunker, cast iron machine, blast furnace pulverized coal production, : 10mg/m3; Hot blast stove of BF:10mg/m3; Steelmaking electric dust removal :50 mg/m3; Steelmaking secondary dedusting :10mg/m3; Dust removal of Lime kiln top and flame descaling: 10mg/m3; Heat treatment furnace:10mg/m3; Finishing mill 10mg/m3; Tension leveler and welder of PLTCM :10mg/m3; Iron powder warehouse: 10mg/m3; Coal-fired and gas-fired generating units: 10mg/m3; Gas boiler: 10mg/m3	4320.49	4330.44	No
Zhixin Co.	PM	Organized	69	Acid regeneration, continuous annealing furnace, normalizing annealing furnace, decarburization annealing furnace, annular furnace, hot drawing furnace, scoring	Acid regeneration<=30mg/m3, heat treatment furnace and scoring <=10mg/m3	Heat treatment furnace, tension leveler, finishing and shot blasting 10 mg/m3, acid regeneration 30 mg/m3	18.005	27.793	No
Zhixin Co.	Sulfur Dioxide	Organized	50	Continuous annealing furnace, normalizing annealing furnace, decarburization annealing furnace, annular furnace and hot drawing furnace	<=30mg/m3	30mg/m3	5.685	81	No

Zhixin Co.	Nitrogen Oxide	Organized	50	Continuous annealing furnace, normalizing annealing furnace, decarburization annealing furnace, annular furnace and hot drawing furnace	<=100mg/m3	100mg/m3	37.512	131.649	No
Cold-R Co.	COD (Chemical Oxygen Demand)	Organized	1	Wastewater stations	10-24.2 mg/m3	30mg/m3	21.4511	67.5	No
Cold-R Co.	Ammonia Nitrogen	Organized	1	Wastewater stations	0.002-2.46 mg/m3	1.5(2.5) mg/m3	0.42035	3.937	No
Cold-R Co.	Sulfur Dioxide	Organized	8	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, 1# boiler room, 2# boiler room, 3# boiler room.	3-5mg/m3	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator:20 mg/m3; 1# boiler room, 2# boiler room, 3# boiler room:10 mg/m3	4.0452	18	No
Cold-R Co.	Nitrogen oxides	Organized	8	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, 1# boiler room, 2# boiler room, 3# boiler room.	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line:7-50mg/m3; Roaster of acid regeneration station :12-59 mg/m3; 2# boiler room :23 mg/m3; 1# boiler room, Hydrogen production generator, 3# boiler room :14-56 mg/m3	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator :100 mg/m3; 1# boiler room, 2# boiler room, 3# boiler room :80 mg/m3	53.0158	148.184	No
Cold-R Co.	Particulate matter	Organized	10	Exhaust gas of tension leveler, continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, iron powder warehouse at acid regeneration station, 1# boiler room, 2# boiler room, 3# boiler room.	Exhaust gas of tension leveler :3.7-4.1 mg/m3; continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator :1.3-5.6 mg/m3; iron powder warehouse at acid regeneration station, 1# boiler room, 2# boiler room, 3# boiler room:1.5-2.8 mg/m3	Exhaust gas of tension leveler, continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator, iron powder warehouse at acid regeneration station :10 mg/m3; 1# boiler room, 2# boiler room, 3# boiler room:5 mg/m3	18.6915	18.75	No