

HARBIN BOSHI AUTOMATION CO.,LTD.

**2022** SUMMARY OF  
ANNUAL REPORT



April 2023

## HARBIN BOSHI AUTOMATION CO., LTD. Annual Report 2022

### ( Abstract )

#### I . Important Notes

This Abstract is extracted from Annual Report 2022. In order to have a full understanding of the operating results, financial condition and future development planning of the Company, investors are suggested to read the full report carefully on the media designated by the China Securities Regulatory Commission (the “CSRC”). The Company’s 2022 Annual Report is prepared and published in Chinese version, and the English version is for reference only. Should there be any inconsistency between the Chinese version and English version, the Chinese version shall prevail.

All directors attended the Board Meeting in person for reviewing of this Annual Report.

Indicate by check mark if independent auditor issues non-standard unqualified opinion.

Applicable Not applicable

Indicate by check mark if there is a pre-arranged plan of profit distribution or transferring capital reserve into common stock for the report period which has been reviewed by the Board of Directors.

Applicable Not applicable

Indicate by check mark if transferring capital reserve into common stock.

Yes No

The Company’s common stock pre-arranged profit distribution plan approved by the Board of Directors is as follows: based on 1,022,550,000 shares, which was the total share capital of the Shenzhen Stock Exchange closed on December 31<sup>st</sup>, 2022, the Company will pay a cash dividend of RMB 2.50 (tax included) for every 10 shares to all shareholders, and 0 bonus shares, and no increase of common stock through capital reserve. If the total share capital of the Company changes before the stock registration date, the Company will adjust the total dividends according to the principle that the proportion of each share is unchanged.

According to the *Proposal on the Company’s Public Offering of Convertible Corporate Bonds*, all shareholders (including those formed by the convertible bonds) registered on the date of registration of the dividend are equally entitled to participate in the current distribution of profits.

Indicate by check mark if preplan for preferred stocks profit distribution to shareholders for the report period which has been reviewed and approved by the Board of Directors.

Applicable Not applicable

## II. Basic Situation of the Company

### 1. Company Profile

|  |  |  |        |
|--|--|--|--------|
| Stock Abbreviation                             | Boshi  | Stock Code   | 002698 |
| Stock Exchange for Stock Listing               | Shenzhen Stock Exchange  |  |        |
| Stock abbreviations before the change (if any) | None   |  |        |
| Contact Person and Contact Information         | Secretary of the Board   | Securities Affairs Representative  |        |
| Name   | Chen Bo  | Zhang Junhui   |        |
| Contact Address                                | 9 Donghu Street, Concentration Zone of Yingbin Road, Harbin Development Zone | 9 Donghu Street, Concentration Zone of Yingbin Road, Harbin Development Zone |        |
| Fax  | +86-451-84367022   | +86-451-84367022   |        |
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| Email  | ir@boshi.cn  | zhangjh@boshi.cn   |        |

In order to speed up the planning and implementation of the construction function of the Company's regional headquarters and provide convenience for value investment, the Company has set up a "Securities and Investment Affairs Office" at No. 1102, Building 2, Huijin Building, No. 55, Shangxiang Road, Huaqiao Economic Development Zone, Kunshan City, Jiangsu Province. Welcome securities investors to inquire about the follow-up of the investigation.

### 2. Key Financial Information

#### (1) Key accounting data and financial indicators in the past three years

Does the Company need to make retroactive adjustment or restatement of the accounting data of the previous year.

Yes  No

Unit: RMB

|   | As of Dec.31, 2022 | As of Dec.31, 2021 | Increase/decrease of 2022 over 2021 | As of Dec.31, 2020 |
|---|--------------------|--------------------|-------------------------------------|--------------------|
| Total assets  | 6,220,273,855.91   | 4,901,945,419.82   | 26.89%                              | 4,576,810,168.61   |
| Total equity attributable to shareholders of the parent company | 3,169,585,012.94   | 2,879,793,106.39   | 10.06%                              | 2,568,750,413.53   |

|  | 2022             | 2021             | Increase/decrease of<br>2022 over 2021 | 2020             |
|--|------------------|------------------|--|------------------|
| Operating Revenue  | 2,153,746,152.69 | 2,112,954,813.09 | 1.93%                                  | 1,827,912,892.55 |
| Net profit attributable to parent<br>company's shareholders  | 445,038,600.37   | 490,327,299.72   | -9.24%                                 | 405,370,652.33   |
| Net profit after deducting<br>non-recurring profit or loss attributable<br>to shareholders of the parent company | 414,143,401.62   | 459,328,151.59   | -9.84%                                 | 375,832,168.49   |
| Net cash flow from operating activities  | 451,531,966.20   | 399,773,130.75   | 12.95%                                 | 147,006,474.65   |
| Basic earnings per share (RMB/share)   | 0.4352           | 0.4795           | -9.24%                                 | 0.3964           |
| Diluted earnings per share(RMB/share)  | 0.4352           | 0.4795           | -9.24%                                 | 0.3964           |
| Weighted average return on equity  | 14.70%           | 18.02%           | -3.32%                                 | 16.83%           |

**(2) Key accounting data by quarter**

Unit: RMB

|   | First quarter  | Second quarter | Third quarter  | Fourth quarter |
|---|----------------|----------------|----------------|----------------|
| Operating revenue   | 504,286,748.22 | 523,820,429.71 | 698,826,750.82 | 426,812,223.94 |
| Net profit attributable to parent<br>company's shareholders   | 153,163,366.86 | 111,217,419.14 | 163,254,718.26 | 17,403,096.11  |
| Net profit after deducting<br>non-recurring profit or loss<br>attributable to shareholders of the<br>parent company | 146,195,048.97 | 101,009,968.07 | 157,612,508.17 | 9,325,876.41   |
| Net cash flows from operating<br>activities   | 55,942,302.81  | 116,231,706.19 | 65,178,409.49  | 214,179,547.71 |

Indicate by check mark if any material difference between the above financial indicators or their summations and those which have been disclosed in the Company's Quarterly or Interim report.

Yes  No

### 3. Shareholders Information

#### (1) Total number of common shareholders and preference shareholders with voting rights recovered and top ten common shareholders

Unit: Share

| Total number of shareholders of common stocks at the end of the reporting period   | 18,925   | Total number of shareholders of common stocks at previous month-end of this report's disclosure | 19,314             | Total number of shareholders of preferred stock with resumed voting right at the end of the reporting period | 0                                | Total number of shareholders of preferred stock with resumed voting rights at previous month-end of this report's disclosure | 0 |
|--|--|---|--------------------|--|----------------------------------|--|---|
| Top 10 shareholders  |  |   |                    |  |                                  |  |   |
| Name   | Nature   | Ownership   | Quantity of stocks | Quantity of restricted stocks held   | Pledged, marked or frozen stocks |  |   |
|  |  |   |                    |  | Status                           | Quantity   |   |
| Unicom Kaixing Equity Investment Management (Zhuhai Hengqin) Limited - Lianchuang Weilai (Wuhan) Intelligent Manufacturing Industrial Investment Partnership (Limited Partnership) | Others   | 17.11%  | 175,007,500        |  |                                  |  |   |
| Deng Xijun   | Domestic natural person  | 9.41%   | 96,181,562         | 72,136,172   |                                  |  |   |
| Zhang Yuchun   | Domestic natural person  | 8.09%   | 82,696,357         | 62,022,268   |                                  |  |   |
| Wang Chungang  | Domestic natural person  | 5.61%   | 57,394,047         | 43,045,535   |                                  |  |   |
| Harbin Institute of Technology Asset Management Co. Ltd  | Domestic state-owned corporate   | 5.00%   | 51,127,500         |  |                                  |  |   |
| Cai Zhihong  | Domestic natural person  | 4.96%   | 50,677,029         |  |                                  |  |   |
| Cai Hegao  | Domestic natural person  | 4.89%   | 50,000,000         | 37,500,000   |                                  |  |   |
| Bank of China Co., Ltd.-China Merchant Ruiwen Hybrid Securities Investment Fund  | Others   | 2.30%   | 23,564,385         |  |                                  |  |   |
| Cheng Fang   | Domestic natural person  | 1.43%   | 14,649,108         |  |                                  |  |   |
| Tan Jianxun  | Domestic natural person  | 1.43%   | 14,576,833         |  |                                  |  |   |
| Explanation on the above-mentioned shareholders' affiliated relationship or concerted action   | Deng Xijun, Zhang Yuchun, Wang Chungang, and Cai Hegao keep concerted action through the <i>Concerted Action Agreement</i> and jointly control the Company at the end of the reporting period; Cai Zhihong is the son of Cai Hegao, he independently exercised shareholder rights based on his personal wishes, he has not signed concerted action agreement or reached a similar agreement or arrangement with Cai Hegao, nor has other concerted action plan, they are not persons acting in concert; Cheng Fang and Tan Jianxun are the sponsors of shareholders of the Company. Cheng Fang is the sister of Wang Chungang's wife. In addition, the Company |   |                    |  |                                  |  |   |

|   |  |
|---|--|
|   | is not made aware whether there is any affiliated relationship between the above-mentioned shareholders or whether they are persons acting in concert as defined in <i>Administrative Measures for the Acquisition of Listed Companies</i> . |
| Explanation on the shareholders that are engaged in margin trading business | Not applicable   |

**Note: During the reporting period, based on full confidence in the Company's sustainable and healthy development and full recognition of the Company's intrinsic value, Mr. Deng Xijun, the chairman and general manager of the Company, increased his holdings of the Company's shares by 975,200 shares through centralized bidding.**

**(2) The total number of preferred shareholders and the top 10 preferred shareholders' shareholdings of the Company**

Applicable Not applicable

During the reporting period, the Company did not have preferred stockholders holding shares.

**(3) The ownership and controlling relationship between the Company and its actual controller in form of diagram**



**4. Bonds**

**(1) Bond profile**

| Bond name  | Abbreviation            | Bond code   | Date of issue                | Maturity                     | Balance (RMB'0,000) | Coupon rate  |
|--|-------------------------|---|------------------------------|------------------------------|---------------------|--|
| Convertible Corporate Bonds of Harbin Boshi Automation Co., Ltd. | Boshi Convertible Bonds | 127072  | Sep. 22 <sup>nd</sup> , 2022 | Sep. 21 <sup>st</sup> , 2028 | 45,000              | 1 <sup>st</sup> year 0.30%<br>2 <sup>nd</sup> year 0.50%<br>3 <sup>rd</sup> year 1.00%<br>4 <sup>th</sup> year 1.50%<br>5 <sup>th</sup> year 1.80%<br>6 <sup>th</sup> year 2.00% |
| Bond redemption and interest payment during the reporting period |                         | No interest needs to pay during the reporting period. |                              |                              |                     |  |

**(2) Top 10 convertible bond holders**

| NO. | Name  | Nature                  | Number of convertible bonds held at the period-end | Amount of convertible bonds held at the period end (RMB) | As % of convertible bonds held at the period end |
|-----|---|-------------------------|--|--|--|
| 1   | Deng Xijun  | Domestic natural person | 423,199  | 42,319,900.00  | 9.40%  |
| 2   | Zhang Yuchun  | Domestic natural person | 363,864  | 36,386,400.00  | 8.09%  |
| 3   | Wang Chungang   | Domestic natural person | 252,534  | 25,253,400.00  | 5.61%  |
| 4   | Cai Zhihong   | Domestic natural person | 222,979  | 22,297,900.00  | 4.96%  |
| 5   | Cai Hegao   | Domestic natural person | 220,000  | 22,000,000.00  | 4.89%  |
| 6   | China Minsheng Bank-Everbright Dexin Credit Enhancement Bond-type Securities Investment Funds           | Others                  | 218,596  | 21,859,600.00  | 4.86%  |
| 7   | Bank of Communication-E Funds Robust Returns Fixed-income Pension Products                              | Others                  | 209,992  | 20,999,200.00  | 4.67%  |
| 8   | China Merchant Bank- E Funds Fenghua Bond-type Securities Investment Funds                              | Others                  | 199,019  | 19,901,900.00  | 4.42%  |
| 9   | Argriculture Bank of China-Qianhai Kaiyuan Convertible Bond-type Initiative Securities Investment Funds | Others                  | 111,605  | 11,160,500.00  | 2.48%  |
| 10  | Industrial Commercial Bank of China-E Funds Robust Configuration NO.2 Hybrid Pension Products           | Others                  | 109,990  | 10,999,000.00  | 2.44%  |

**(3) Latest rating and rating change**

During the reporting period, on May 5<sup>th</sup>, 2022, China Lianhe Credit Rating Co., Ltd. issued *the Credit Rating Report of Harbin Boshi Automation Co., Ltd.'s Public Issuance of Convertible Corporate Bonds*. The long-term credit rating of the Company was “AA”, the credit rating of this convertible corporate bond was “AA”, and the bond rating outlook was “stable”. The credit rating report mentioned above is available at [cninfo.com.cn](http://cninfo.com.cn).

**(4) Selected financial information of the Company for the past two years**

Unit: RMB'0,000

| Item   | 2022      | 2021      | Increase/Decrease over last year | Explanation   |
|--|-----------|-----------|----------------------------------|---|
| Liability /asset ratio   | 46.20%    | 37.82%    | 8.38%                            |   |
| Net profit after deducting non-recurring profit or loss attributable to shareholders of the parent company | 41,414.34 | 45,932.82 | -9.84%                           |   |
| EBITDA/liability ratio   | 122.32%   | 1,563.93% | -1,441.61%                       | Mainly due to the issue of convertible corporate bonds in the current period, total liabilities increased year-on-year. |
| Interest cover (times)   | 104.76    | 403.54    | -74.04%                          | Mainly due to the issue of convertible corporate bonds in the current period, interest expenses increased year-on-year. |

**III.Important Issues**

The China Securities Regulatory Commission passed *the Approval on Harbin Boshi Automation Co., Ltd. Public Offering of Convertible Corporate Bonds* (CSRC Permission [2022] No.2035). On September 22<sup>nd</sup>, 2022, the Company public issued 4.5 million convertible corporate bonds with each face value of RMB 100, and the total issuance of RMB 450 million.

Shenzhen Stock Exchange approved listing application of the Company's (Shenzhen Stock Exchange [2022]1024). On November 3<sup>rd</sup>, 2022, the Company's convertible corporate bonds of RMB 450 million was listed on Shenzhen Stock Exchange. The abbreviation was "Boshi Convertible Bonds", and the bond code was "127072".

Please refer to relevant documents disclosed by the Company on *Securities Times* and *cninfo.com.cn* for details.

## IV. Management Discussion and Analysis

### 1. The Company's Industry Status during the Reporting Period

#### (1) Industry overview

According to the proportion of revenue during the reporting period, the Company's main businesses in its industry are shown in the following figure:



The core growth businesses of the Company are intelligent manufacturing equipment and industrial services rooted in intelligent manufacturing equipment, which belong to high-end equipment manufacturing industry and modern service industry respectively. Moreover, they are all key industrial directions supported and led by the State.

#### Overview

The Company has been cultivating in the field of intelligent equipment for a long time, and the high-end intelligent equipment with independent intellectual property rights has been continuously upgrading for Chinese Manufacturing, replacing imported equipment or being the first applications equipment to promote the technological progress of related industries. In recent years, with the improvement of 5G, industrial Internet and other digital economy infrastructures, the Company has accelerated the application of digital and intelligent technologies mastered by the Company. Now it has the engineering and implementation capability of the overall solutions of digital workshops and intelligent factories in multiple product application fields.

From the perspective of revenue composition, the revenue of two core growing businesses, intelligent manufacturing equipment and industrial services, account for 96% of total. The Company's intelligent manufacturing equipment are applied in petrochemical, sub-merged arc furnace, new energy, grain, animal feeds, building materials, medicine, food, port, and many other industries, to provide customers with efficient intelligent manufacturing equipment and intelligent factory overall solutions. The Company's technology and intelligent equipment are in the leading position in the application field of domestic industry, no competitors in the same volume; In some fields, the Company products and technology applications are in the world leading level.

From the perspective of industry, large-scale Chinese manufacturing enterprises generally have automated production lines, among them, the proportion of digitalization is not high, data sharing is not much from factories to factories, and intelligent technology is not widely used. The overall level of intelligent manufacturing in China is still far away from the world's advanced level. The endogenous power of leading manufacturing enterprises has a large potential demand for intelligent manufacturing equipment and the overall solution of intelligent factories, and the market demand presents long-term, sustainable and without obvious periodicity.

### **Intelligent Manufacturing Equipment:**

“Manufacturing is the main body of the national economy, the foundation of building the country, the instrument of rejuvenating the country and the foundation of strengthening the country.” *Made in China 2025* points out that China's manufacturing industry has an obvious gap in independent innovation ability, resource utilization efficiency, industrial structure level, informatization degree, quality and efficiency, and the task of transformation, upgrading and leapfrog development is urgent and arduous. The State attaches great importance to the development of high-end equipment manufacturing industry from the strategic height, and the development of intelligent manufacturing is a strategic task of long-term persistence, which will accelerate the integrated development of the new generation of information technology and manufacturing technology and take intelligent manufacturing as the main direction of the in-depth integration of informatization and industrialization.

In recent years, the state issued *the 14<sup>th</sup> Five-Year Plan for Intelligent Manufacturing Development*, *the 14<sup>th</sup> Five-Year Plan for the Development of Robot Industry*, *the 14<sup>th</sup> Five-Year Plan for In-depth Integration of IT Application and Industrialization*, *the 14<sup>th</sup> Five-Year Plan for the Development of Digital Economy*, “*Robot Plus*” *Application and Implementation Plan*, planning and guiding the high-end equipment manufacturing industry in the “14<sup>th</sup> Five-Year Plan” and 2035 long term goals, which provides strong support for accelerating the construction of a manufacturing power, a digital industry and a digital China and promoting the development of China's intelligent manufacturing and digital economy.

The Company implements differentiation competitive strategy (technology leadership), with the accumulation and industrial application practice in the direction of automation, digital, intelligent technology, facing the demand of “Made in China” for intelligent equipment, digital workshop, intelligent factory, the Company concentrates advantage, integrates resources, saves competitiveness, to response and guild the market demand actively with rich product line and intelligent manufacturing overall solution; The Company strives to achieve its own relatively fast development and bring consistent returns to shareholders.

### **Industrial Service:**

On March 16<sup>th</sup>, 2021, the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Industry and Information Technology and the like totaling thirteen departments jointly issued *the Opinions on Accelerating the High-quality Development of the Manufacturing Service Industry*, pointing out, “Improve the efficiency of the manufacturing industry, make use of new generation information technologies, such as 5G, big data, cloud computing, artificial intelligence and blockchain, vigorously to develop intelligent manufacturing, achieve accurate and efficient matching between supply and

demand and promote the fundamental reform of the manufacturing development model and the reform of enterprise forms.” Manufacturing service industry “is an important support for improving the competitiveness and comprehensive strength of manufacturing products, promoting the transformation and upgrading of manufacturing industry and high-quality development. At present, China’s manufacturing service industry supply quality is not high, the degree of specialization and socialization is not enough, the role of leading the manufacturing value chain is not obvious, and there is still a gap between the requirements of building a modern economic system and realizing high-quality economic development.” “By 2025, the role of the manufacturing service industry will be significantly enhanced in improving the quality and efficiency, innovation capacity, and efficiency of resource allocation, and play a more prominent role in supporting and leading the high-quality development of the manufacturing industry” to “realize the coupling and integration of the manufacturing industry and the manufacturing service industry”.

The production and operation management service of the Company’s intelligent equipment includes integrated industrial services for equipment operation, repair, maintenance, finished products outbound & inbound, transfer, truck loading and so on. The professional work presents a trend of outsourcing. The Company takes precautions, relying on the leading technology advantage, and continues to vigorously promote the strategy of product and service integration. The professional, economic, high-quality and efficient service has been recognized and praised by customers. The Company’s industrial service revenue has increased year after year. During the reporting period, the overall revenue of industrial services reached RMB 639 million, accounted for nearly 30% of total.

Based on the Company’s outstanding achievements in the integrated development of intelligent manufacturing equipment and industrial services, the Company was identified as “Pilot Unit of Advanced Manufacturing and Modern Service Industry” in August 2021 by the National Development and Reform Commission. The intelligent equipment industry services have covered all regions except Hong Kong, Macau, Taiwan and Tibet, the service scale and profitability are in the leading position in the industry. The Company’s industrial services of intelligent equipment, on the one hand, will maintain a steady growth with the growth of product sales and equipment implement stock. On the other hand, this will give an active response to the customer’s deep service demand, after the Company undertakes and implements new production and operation industrial service projects, the service scale is expected to continue to step up. This will enhance the Company’s ability to resist risks and become an important source of revenue and profit for the Company.

The Company’s industrial service network and capability, surrounding “industrial service plus”, are facing big potential market opportunities; That is, the Company’s industrial service network is expected to undertake more industrial service market demand independent from the Company’s own equipments, and then forming a new industrial direction of intelligent manufacturing equipment enabled with “industrial service plus”.

### **Environmental Protection Process and Equipment:**

The 14<sup>th</sup> Five-Year Plan takes “achieving new progress in ecological civilization construction” as one of the main goals. Continuing to improve environmental quality and promoting the all-round green transformation of economic and social development provides important development opportunities for the field of

environmental protection. Industrial waste acid and acidic gas treatment and recycling project, implemented by Harbin Boao Environmental Technology Co., Ltd, the holding subsidiary of the Company, can collect and treat industrial waste sulfuric acid and sulfur-containing acid gases in chemical production to produce high-purity sulfuric acid for recycling production, and to recycle and reuse the heat energy released in the process to achieve energy saving, emission reduction, recycling, environmental protection and economic results, that it will contribute to achieve “Carbon Peak” , “Carbon Neutrality” emission reduction targets.

## **(2) Industry policy impact**

In recent years, the state has issued intensive industrial policies and industry plans related to intelligent manufacturing, robot and digital economy, leading the development of the industry, and the field of intelligent manufacturing equipment is facing major development opportunities. At the same time, the technology accumulation and technological innovation of high-end equipment manufacturing enterprises are constantly improved, and the project implementation ability is becoming increasingly mature. From the Company’s long-term industrial practice in the field of intelligent equipment industry, the demand of China’s manufacturing enterprises for intelligent equipment is in the ascendant, and the field of intelligent manufacturing equipment will continue to flourish.

In January 2023, seventeen departments including the Ministry of Industry and Information Technology, issued the “*Robot Plus*” *Application Action and Implementation Plan*, proposed the density of manufacturing robot will double compared with 2020, by 2025. The depth and breadth of the application of service robots and special robots industries have been significantly improved, and the ability of robots to promote high-quality economic and social development will be significantly enhanced. Focus on 10 key application areas, break through more than 100 kinds of robot innovation application technology and solutions, promote more than 200 robot typical application scenarios with high technical level, innovative application mode and significant application effect, build a batch of “robot plus” benchmarking enterprises, and construct a batch of application experience centers and experimental verification centers.

In April 2022, the Ministry of Industry and Information Technology, the National Development and Reform Commission, Ministry of Science and Technology, Ecological Environment Ministry, Ministry of Emergency Management, the National Energy Administration jointly issued *the Guidelines on Promoting High-quality Development of Petrochemical and Chemical Industries in the 14<sup>th</sup> Five-Year Plan*, pointing out that the reform and innovation as the fundamental power, plan development and security as a whole, accelerate the traditional industry transformation, vigorously develop chemical new materials and fine chemicals, speed up the industrial digital transformation, improve the level of intrinsic safety and clean production, accelerate quality change, efficiency change, dynamic change in the petrochemical industry, promote our country from the petrochemical and chemical great power to strong power. One of the main goals set forth in the guideline is digital transformation, with enterprises in key areas such as petrochemical and coal chemical industries achieving an automatic rate of over 95% of their main production devices, building about 30 demonstration factories of intelligent manufacturing and about 50 demonstration zones of intelligent chemical industry. The guidelines also proposed to promote the digital transformation of industries, accelerate the collaborative innovative application of new technologies and new models, create characteristic platforms, accelerate the integration of 5G, big data, artificial intelligence and other next-generation information technologies with the petrochemical and chemical industry, constantly enhance the acquisition capacity of chemical process data,

and enrich the data of enterprise production management, process control, product flow and other aspects, promote demonstration and guidance, and strengthen industrial Internet empowerment. It has issued guidelines for the construction of a standard system for intelligent manufacturing in the petrochemical and chemical industry, and compiled standards for intelligent factories, smart zones etc,. According to the characteristics of the industry, a number of digital workshops, intelligent factories and smart zones will be built and selected.

In December 2021, The State Council issued *the 14<sup>th</sup> Five-Year Plan for the Development of Digital Economy*, which defines the guiding ideology, basic principles, development goals, key tasks and safeguard measures for promoting the healthy development of digital economy during the period. Digital economy is the main economic form after agricultural economy and industrial economy. It takes data resources as the key element, modern information network as the main carrier, integrated application of information and communication technology and all-factor digital transformation as the important driving force, and promotes a new economic form with more unified fairness and efficiency. According to the plan, the digitalization, networking and intelligence of the manufacturing industry will be deepened, and the integrated development of producing services will be accelerated. We will comprehensively deepen the digital transformation of key industries. Based on the characteristics and differentiated needs of different industries, we will promote all-round and whole-chain digital transformation of traditional industries and improve total factor productivity. We will deepen the digital transformation of industry, accelerate the digital transformation of R&D, design, production and manufacturing, operation and management, and market services across the whole life cycle, and accelerate the cultivation of a number of small and medium-sized enterprises that are “specialized and innovative” and individual champions in manufacturing. We will carry out intelligent manufacturing projects, vigorously promote the digitalization of equipment, carry out special campaigns to pilot and demonstrate intelligent manufacturing, and improve the national system of intelligent manufacturing standards.

In December 2021, the Ministry of Industry and Information Technology and so on eight departments jointly issued *the 14<sup>th</sup> Five-Year Intelligent Manufacturing Development Plan*, put forward the following planning goals: in 14<sup>th</sup> Five-Year and the future for a long period, promote intelligent manufacturing based on manufacturing nature, stick to intelligent features, take the process and equipment as the core, take the data as the base, rely on manufacturing units, workshops, plants and supply chain as carrier, build virtual-real integrated, knowledge-driven, dynamic optimizing, safe and efficient, green and low carbon intelligent manufacturing system, promote manufacturing digital transformation, network collaboration and intelligent reform. By 2025, most large-scale manufacturing enterprises will realize digital networking, and backbone enterprises in key industries will initially apply intelligence; by 2035, large-scale manufacturing enterprises will fully popularize digital networking, and backbone enterprises in key industries will basically realize intelligence.

In December 2021, the Ministry of Industry and Information Technology, the National Development and Reform Commission, the Ministry of Science and Technology and so on 15 departments jointly issued *The 14<sup>th</sup> Five-year Robot Industry Development Plan*, put forward the following planning goals: by 2025, China has become a global robot technology innovation source, high-end manufacturing cluster and new heights of integrated application. Breakthroughs have been made in the number of core robot technologies and high-end products, breakthroughs have been made in the number of core robot technologies and high-end products, the

comprehensive index of the complete equipment has reached the international advanced level, and the performance and reliability of key parts have reached the international level of similar products. The operating revenue of the robot industry will grow by more than 20% annually, form a number of internationally competitive leading enterprises and a large number of specialized and special and new “Little Giants” enterprises with strong innovation ability and good growth ability, and build 3 to 5 industrial clusters with international influence. The density of manufacturing robots has doubled. By 2035, the comprehensive strength of China’s robot industry will reach the international leading level, and robots will become an important part of economic development, people’s life and social governance.

In November 2021, the Ministry of Industry and Information Technology issued *the 14<sup>th</sup> Five-year Plan for Green Industrial development*, put forward the following goals: by 2025, industrial structure, mode of production and green and low-carbon transition have made significant progress. Green and low-carbon technologies and equipment have been widely applied, the efficiency of energy and resources utilization has been greatly improved, and green manufacturing has been comprehensively improved, laying a solid foundation for reaching a Carbon Peak in the industrial sector by 2030.

In November 2021, The Ministry of Industry and Information Technology issued *the 14<sup>th</sup> Five-year Plan for the In-depth Integration of Informatization and Industrialization*, put forward the following goals: by 2025, informatization and industrialization will realize integrated development in a wider range, deeper degree and higher level, and the penetration of the new generation of information technology into all fields of manufacturing was accelerated, the scope was significantly expanded, the degree was continuously deepened, and the quality was greatly improved. The pace of digital transformation of manufacturing was significantly accelerated. New models and new business forms are widely popularized; industrial digital transformation has remarkable results; the integration support system is continuously improved; the vitality of enterprise integration development is activated fully; and the integrated ecosystem is developed prosperously.

## 2. Company Main Businesses during the Reporting Period

### (1) Main businesses, products, services composition and market application level of the Company

#### Overall Solution for Intelligent Manufacturing Equipment and Intelligent Factory

|   |  |
|---|--|
| <p><b>Post-processing Intelligent Manufacturing Equipment for Solid Material</b></p>  | <p><b>Post-processing Intelligent Manufacturing Equipment for Rubber</b></p>   |
| <p>It is applied in the post-processing fields for the powder, granular materials or irregular materials of petrochemical, new energy, grain, animal feeds, building materials, medicine, food, ports etc. (such as crushing, screening, bagging, boxing of new energy field polysilicon reduced silicon rods, etc.), providing efficient automatic weighing, packaging and palletizing intelligent manufacturing and production equipment and overall solutions of smart factories</p>           | <p>It is intelligent equipment and intelligent plant overall solution, applied in production process of synthetic rubber and natural rubber and in the fields of product refining process, dewatering and drying process (rubber washing, cleaning and impurity removal, dewatering, crushing and drying, etc.) and finished product packaging process (weighing, baling, detecting, conveying, packaging and palletizing, etc.)</p> |
| <p>In the field of post-processing high-end equipment for powder and granular materials in China it has obvious advantages and a stable competitive position. In the field of post-processing high-end equipment for the new energy field irregular polysilicon materials, the original first set of applications has promoted the upgrade of intelligent manufacturing in the industry.</p>  | <p>Complete product line, covering natural rubber and synthetic rubber; It is the only supplier which can provide complete large-scale systems worldwide.</p>  |
| <p><b>Robot Plus</b></p>  | <p><b>Intelligent Logistics, Warehousing Systems</b></p>   |
| <p>(High temperature) Operation robot for submerged arc furnace and serialized intelligent products, complete system solutions are applied for high-risk working environment as well as other special robots and complete system solutions which can replace high-risk, harsh working conditions, and heavy manual labor.</p>   | <p>Connecting solid material post-processing intelligent manufacturing equipment with rubber post-processing intelligent manufacturing equipment to realize intelligent identification, outbound and inbound warehousing management, logistics transshipment, fully Automatic Vehicle Loading, etc., to help customers to build smart factory overall solutions.</p>   |
| <p>(High temperature) Operation robot for sub-merged arc furnace and its surrounding systems are in leading position worldwide in the field of calcium carbide; It is carrying out innovative implementation of the intelligent workshop project for the calcium carbide arc furnace, committed to promoting the production of fewer people, unmanned, safe, efficient and environmental", and bringing the traditional industrial technology revolution with industry subversive technology.</p> | <p>Automatic Loading machine has first-mover advantage, the market responds positively and no industry attribute, the large-scale application has big potential in the future.</p>   |

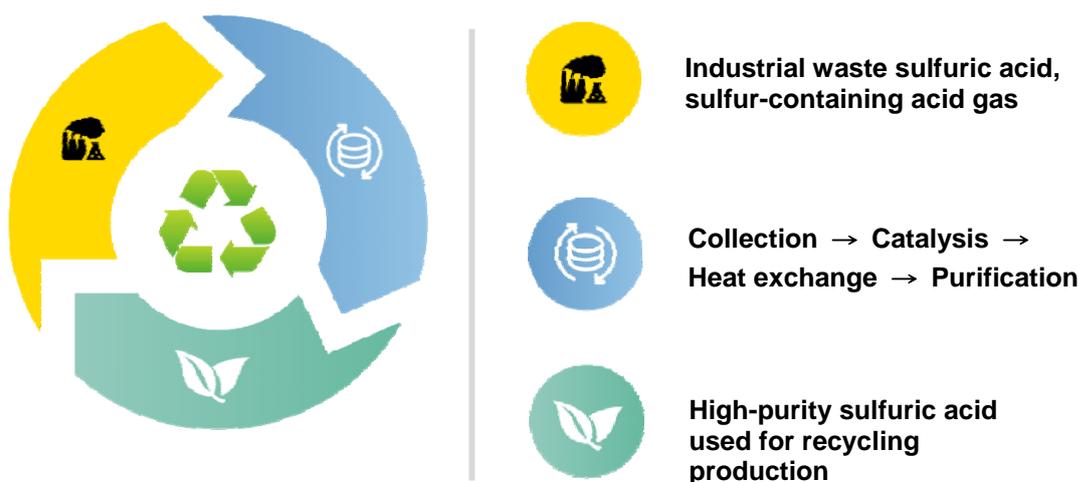
## Industrial Services

The industrial services, rooted in the above-mentioned related fields of intelligent manufacturing equipment, are mainly integrated service, equipment maintenance and spare parts sales which facing the operation in the application fields of intelligent manufacturing equipment, after-sales industrial service, and supplementary industrial service.

The Company's industrial service network and service capability are expected to undertake other market demand more than the Company's own in the future and then form a new industrial direction of "industrial service plus" enabling intelligent manufacturing equipment.

Holding technical genetic advantages, leading service capabilities and scale in the field

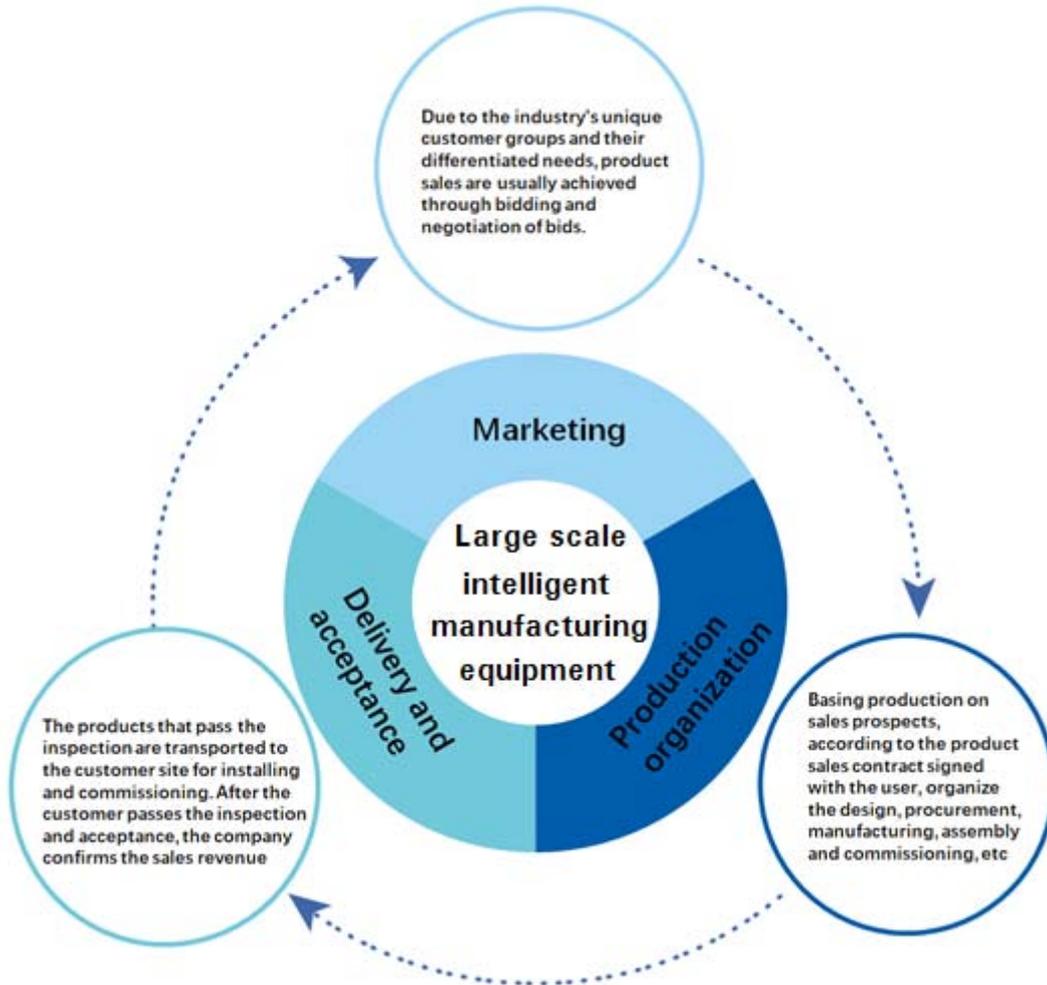
## Energy saving, emission reduction and environmental protection process equipment field



Harbin Boao Environmental Technology Co.,Ltd is currently mainly engaged in the design, production, and sales of energy-saving, emission-reduction and environmental protection process equipment which is represented by industrial waste acid regeneration process and equipment. Industrial waste acid regeneration technology and equipment collect and process industrial waste sulfuric acid and sulfur-containing acid gas which are produced in the customer's chemical production to generate high-purity sulfuric acid for recycling production, and release heat energy for recycling and reusing, realizing the effects of energy saving and emission-reduction, recycling uses, economy and environment protection and help to achieve carbon peak and carbon neutral emission reduction targets.

**Realizing the effects of energy saving and emission-reduction, recycling uses, economy and environment protection.**

(2) Business mode



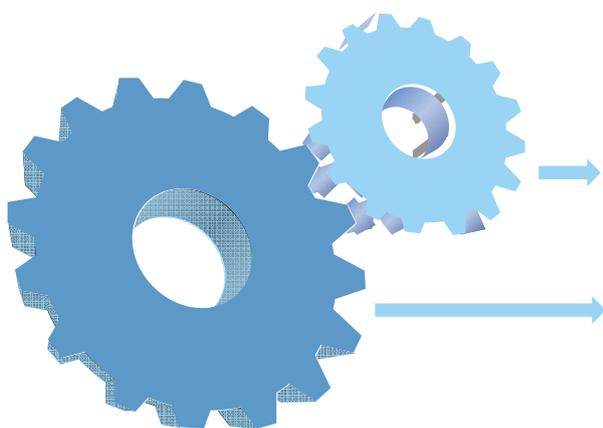
## Industrial Services——Operation and After-sales type Industrial Services



By participating in bidding or negotiating bids, the Company signs integrated service, equipment maintenance service agreements with customers (which may include FFS film rolls sales matching with production services), equipment maintenance, operation maintenance and the like to determine the contents and modes of services;

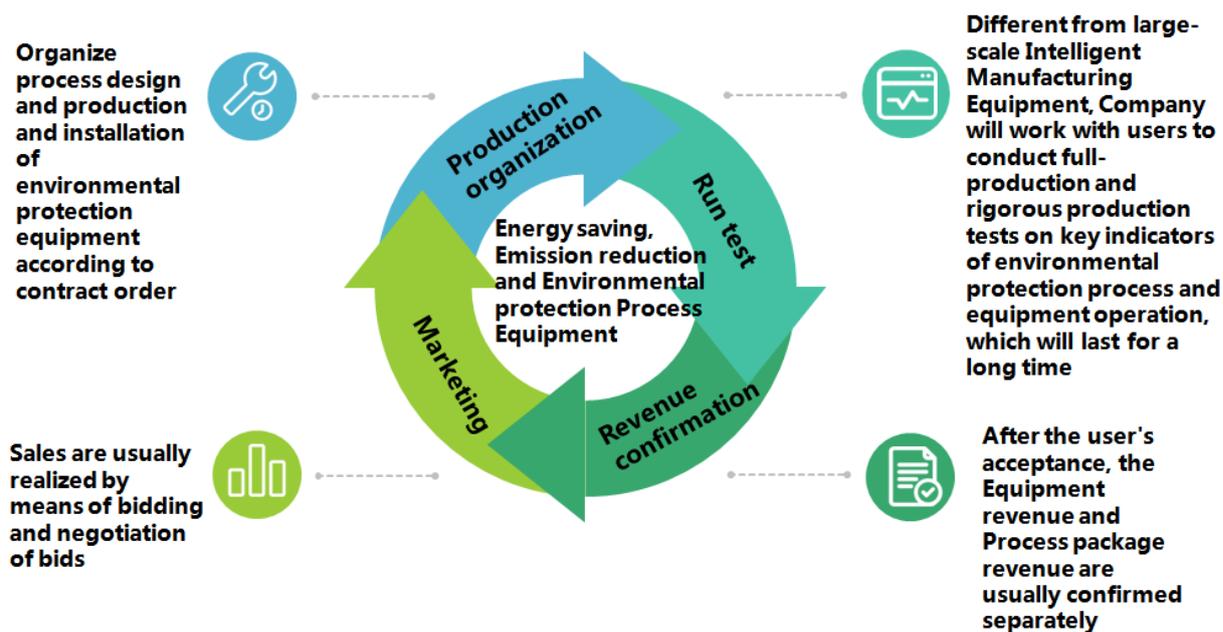
For the performance obligations of the service contract performed within a certain period of time, the Company shall recognize the revenue according to the performance progress within the period of time; The sales mode of spare parts is flexible (the Company initiates stocking or the customer initiates procurement), and the operating revenue is confirmed based on the actual delivery of the product and the time when the revenue confirmation conditions are met

## Industrial Services——Supplementary Industrial Services and Miscellaneous



FFS Film roll production enterprise matching with industrial services (Nanjing Green New Material Co., Ltd., Company's holding subsidiary) separately sells FFS film rolls, plastic auxiliaries and the like apart from the Company's production and operation services; Other kinds with small revenue are not classified as material.

Revenue recognition: Usually as per the contract signed with customer, implement the contract and meet the revenue conditions, then confirm the operating revenue.



### (3) Key performance driving factors

Since 2017, the Company performance has grown well and rapidly, mainly due to the Company is facing the strong demand for intelligent manufacturing equipment for the upgrading of digitization and intellectualization in China's manufacturing industry. The Company implements technology research and development and product innovation actively, as well as realizes product category expansions. The sales growth of post-processing intelligent manufacturing equipment for solid material is strong; Represented by high-temperature furnace operation robots, the special operation robots and their supporting products are promoted and applied in the fields of high risk, harsh and heavy working conditions. Contracts from "robots plus" quickly occupy an important share, which strongly promote the rapid growth of the Company's overall performance; The successful R&D and application of post-processing intelligent equipment for solid material in the field of new energy polysilicon raw materials expended the application range of post process intelligent manufacturing equipment for irregular material, and the market demand has exploded; The growth of industrial services, enabling intelligent manufacturing equipment, keeps steadily, already accounts for 30% of total revenue, and become an important source of revenue and profit. Energy saving and environmental protection business brings beneficial supplement to the Company's overall revenue.

During the reporting period, the operating revenue of intelligent manufacturing equipment and industrial service continued to grow steadily; The operating revenue of energy conservation, emission reduction and environmental protection process and equipment declined; The overall operating revenue increased by 1.93% year-on-year. Affected by the substantial increase of R&D expenses, the decrease of investment income and the actual receipt of software tax rebates, and other factors, the net profit has decreased by 9.24% year-on-year. Please refer to "Main Businesses Analysis" for details.

During the reporting period, the demand for irregular material intelligent manufacturing equipment represented by the intelligent workshop of calcium carbide sub-merged arc furnace and the post processing intelligent equipment of new energy polysilicon raw materials was strong, and the Company's marketing

work has achieved great results again and again. 2022 is already become history, 2023 has come, the future deserves more expectations.

Technological innovation and the continuous R&D, application and promotion of new products have realized “the second curve” to promote the Company to extend growth period. The Company’s intelligent manufacturing equipment has experienced a continuous technological innovation and the expansion process of continuous application of new technology and new products. At present, the company has made a progress in switching from a single machine, automatic production line to the digital factory and intelligent factory in the main product application field, which optimizing the business competition environment faced by the Company, and improving comprehensive competitiveness continuously.

**The Company’s future performance growth and driving factors are mainly:**

- ① The promotion of the overall solutions of post-processing intelligent manufacturing for solid material between different customers and the replication of the growth momentum brought by different factories;
- ②The expansion of production in the field of new energy raw materials polysilicon releases the demand for irregular material post-processing intelligent equipment, as well as the Company’s continuous research and development, forming the ability to expand and put into use in multispecies while forming the vertical product line;
- ③Facing R&D, demonstration application and expansion of unmanned workshops and intelligent factories, which are people reduced, unmanned, safe, efficient and environmental, in the field of calcium carbide
- ④R&D, application and expansion of high-temperature special operation robots (under high-risk, heavy and harsh working conditions) in the field of ferrosilicon, silicon, manganese and industrial silicon;
- ⑤ The application of FFS (Form-Fill-Seal) post-processing intelligent manufacturing equipment for solid materials in the field of PVC and building materials;
- ⑥With the technology accumulation in fine chemicals industry and the acceleration of industry application and imported substitution, the demand for intelligent manufacturing equipment continues to enlarge in the field of fine chemicals;
- ⑦Promotion and accelerating application of overall solutions such as intelligent warehousing, logistics and truck-loading system for a wide range of large-scale enterprises in the national economy;
- ⑧Phased implementation and continuous industrialization of overall solutions of intelligent factory;
- ⑨Technology development, project accumulation and industrialization application of iron and steel intelligent manufacturing solutions;

⑩The continuous growth of Industrial Services and new undertaking industrial service projects of production and operation has brought a large increase in the implementation, as well as the use of the Company's industrial service network, service capacity, the future is expected to undertake more industrial service market demand other than the Company's equipment, and then forming the "industrial service plus" enabling intelligent manufacturing equipment industry momentum.

The mentioned above are the details of the future performance growth driving factors, please combine the "Core Competitiveness Analysis" part of this report as well as the "The Company's Outlook for Future Development", and other relevant contents.

### 3. Core Competitiveness Analysis

As a technology-based enterprise, the Company adheres to a differentiated competitive strategy of leading technology, and relies on a deep understanding of China's industrial automation field and practical experience in industrial applications to maintain a long-term competitive position in the field in which it is engaged. The Company's intelligent manufacturing equipment and industrial service businesses are effectively synergized and optimally linked, supplemented beneficially by environmental protection process equipment. The business scale is growing rapidly, the profitability continues to improve, and the comprehensive competitiveness is continually improved.

#### (1) Industry status

The Company has a solid competitive advantage in the field of intelligent manufacturing equipment, and its main product and technology has been playing a leading role for a long time in the domestic product application field, and has won a number of industry awards.



#### (2) Leading competitiveness of products and technologies

Innovation is the first driving force to lead the development of an enterprise and technology-leading is an important core competitiveness of the Company. The Company continuously improves its technology

application level and technology reserve capacity, seizes new opportunities, and expands into new fields. Through R&D investment, technology accumulation and technological innovation, outstanding technological leadership advantage continues to enhance and be a competitive position in the industry.

From the perspective of intelligent manufacturing equipment product line, the Company's intelligent equipment has technical advantages of high speed, accuracy and reliability. It is a replacement of imported high-end equipment, suitable for the customer production environment with high efficiency and safety production requirements. In the domestic product application field, products and technology are at the leading level, among them, partial of the products are in the worldwide leading position.

On March 24<sup>th</sup>, 2022, the Company received a notice from the High-tech Research and Development Center of the Ministry of Science and Technology on the comprehensive performance evaluation conclusion of *the research and development and demonstration application project of sub-merged arc furnace robot system for calcium carbide under the national key research and development program*. The comprehensive performance evaluation conclusion of the research and development and demonstration application project of sub-merged arc furnace robot system for calcium carbide led by the Company was passed, with a score of 92.4 (Grade A) and the performance level is excellent. Being able to undertake "National Key Research and Development Projects" is the national recognition of the Company's technological innovation strength; The Company has passed the project acceptance with excellent results, which is the verification and interpretation of its own scientific and technological innovation ability. In the field of calcium carbide smelting operation, with the Company's large-scale application of calcium carbide smelting operation robot to replace the manual operation under high-risk and heavy working conditions, it has realized the long-cherished wish and responsibility of transforming traditional industries with high-technology.

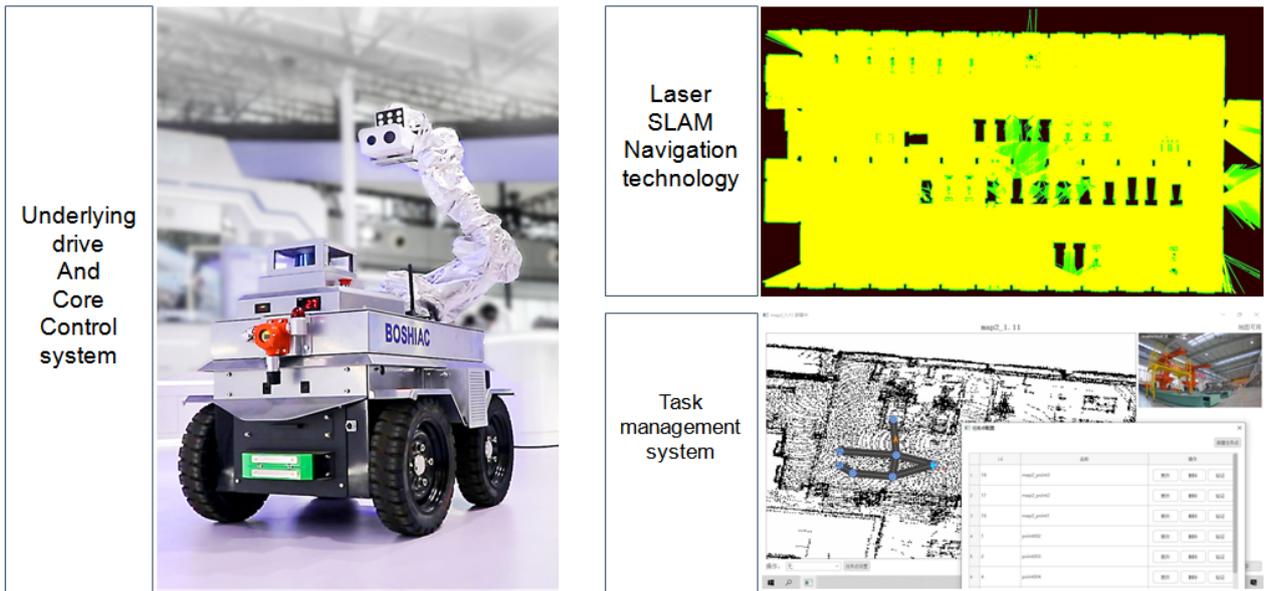
From the perspective of the overall solution of intelligent manufacturing, the Company integrates multi-category innovative products with the production scenario of manufacturing customers, which realizes the overall solution of solid materials post-processing and sub-merged arc furnace smelting products intelligent manufacturing, help customers realize the digital and intelligent transformation of the factory, and realize intelligent manufacturing.

Currently, the Company actively implement overall solution of intelligent factories in the field of calcium carbide sub-merged arc furnace, has respectively signed contracts of calcium carbide post-processing intelligent factories/workshop with Inner Mongolia Jun Zheng Chemical Co., Ltd., and Ningxia Younglight Chemical Co., Ltd during reporting period, amounted to RMB 360 million in total, in this field, the Company is in the leading level in the application all over the world.

### **(3) Underlying technology accumulation and platform technology to enhance the competitiveness.**

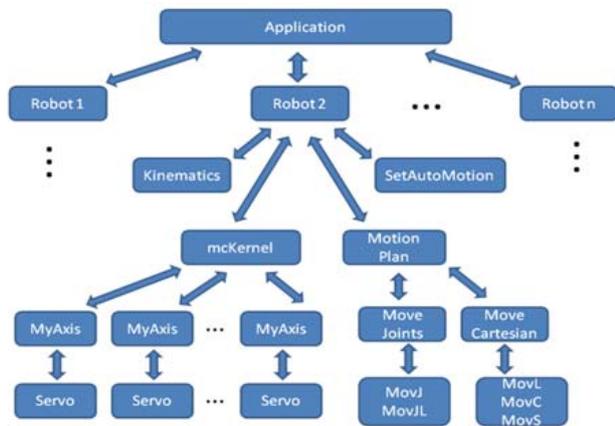
Mastering the underlying technology, algorithm and platform technology can form the technical advantage of rapidly developing different models and functions according to the industry demand, which is the core technology that the Company must master to implement digital factory, intelligent factory and to realize industrial digitalization. It can truly realize the independence and controllability of core technology, continuously promote the implementation of the Company's technology leading and differentiation strategy,

and enhance the Company's core competitiveness.



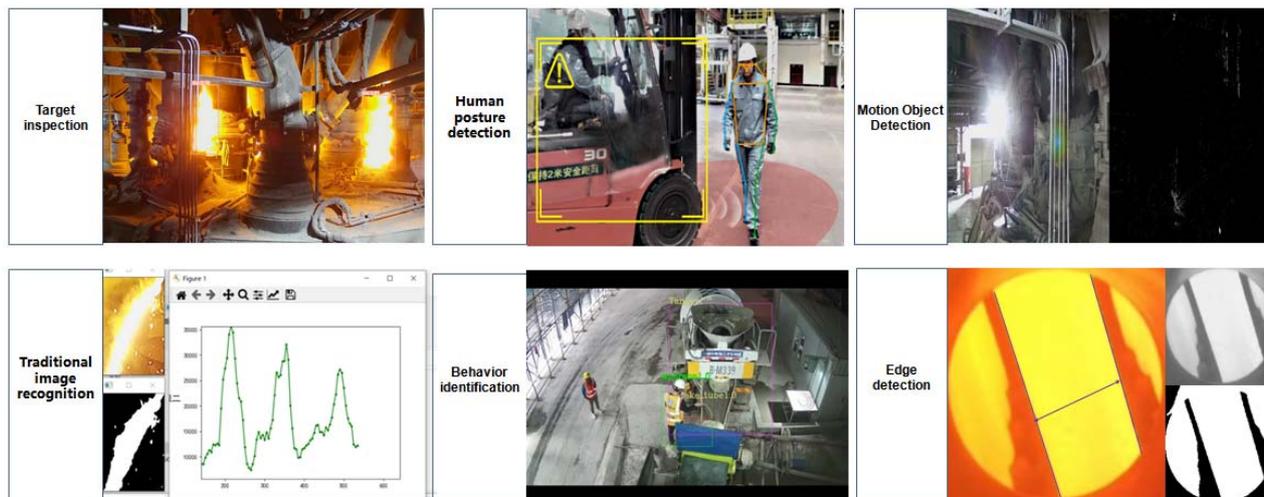
Legend: Development platform for mobile robot system based on autonomous navigation

Note: This section is schematic diagram, some photos and blurred images, under the premise of technical confidentiality, are used to enhance investors' understanding of relevant applications, the following is omitted.



The underlying program code of the motion control system is completely autonomous and has the advantages of modularity and high flexibility. The system uses object-oriented programming technology, the code is highly reusable, through the interface binding module function. Combined with related robot kinematics and dynamics model, multi-axis motion control is realized to complete the control of robots with different functions and specifications. It has been applied to the direction of oven robot, palletizing robot, truss robot and so on.

Legend: Motion control system



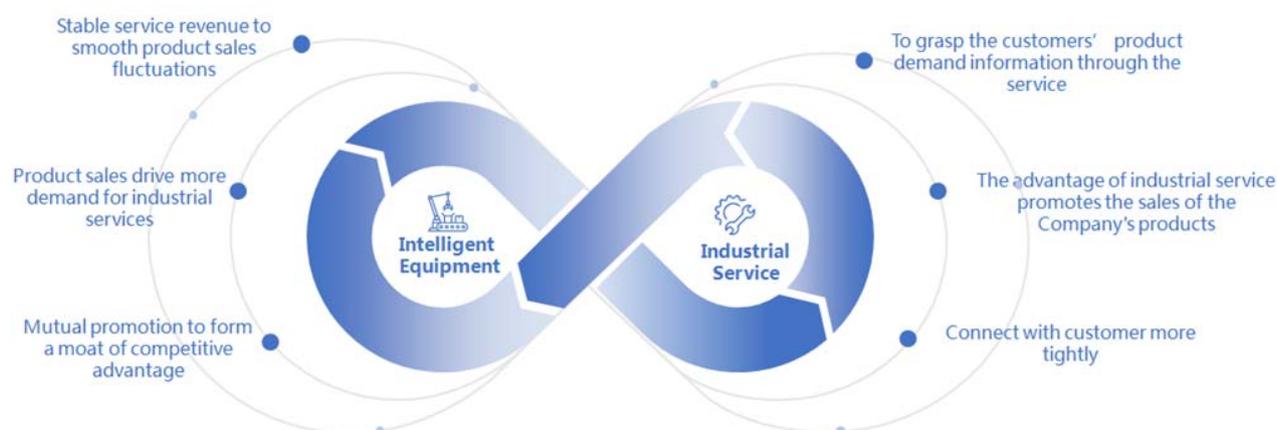
Legend: Research and development platform of intelligent identification system based on artificial intelligence



Legend: Intelligent inspection and digital vision technology

#### (4) Performance-driven dual engines of “intelligent equipment” + “industrial service”

The Company fully integrates product application advantage, technological leading advantage and industrial service, actively promotes the strategy of products and service integration and service business achieves rapid development. The Company’s professional, high-quality, efficient and advanced industrial service model is the necessary guarantee for customers’ continuous production and operation, stable and efficient production, and achieves a win-win situation for the Company and customers.



Legend: The positive interaction between intelligent equipment and industrial service

In August 2021, the Company was identified by the National Development and Reform Commission as the National “Pilot Unit for Advanced Manufacturing Integrated Development and Modern Service Industry”, becoming one of the few leading enterprises of “Two Industries Integration” in the country. This award is a recognition and incentive for the Company to develop the “Product and Service Integration” strategy prospectively and actively implement this strategy for a long time. During the reporting period, the Company’s industrial services achieved revenue of RMB 639 million, continued to maintain steady growth. “Intelligent equipment” + “industrial services” constitute a performance-driven dual engine for the Company.

##### **(5) The overall solution of intelligent manufacturing accelerates the Company’s competitiveness.**

Throughout the Company’s technology, product development and industrialization process, the Company enters new industries and new fields usually with key single unit equipment ( “points” ); after breakthrough in solving industry pain points, quickly form an automated production line ( “line” ); With the accumulation of technology and the in-depth understanding of the industry, the overall solution ( “surface” ) of intelligent manufacturing is completed to help customers realize the upgrade to digital and intelligent factories. This process of technological progress from “point → line → surface” helps the Company to concentrate resources, reduce technology development risks, open the ceiling for industry growth, and comprehensively enhance the Company’s core competitiveness.

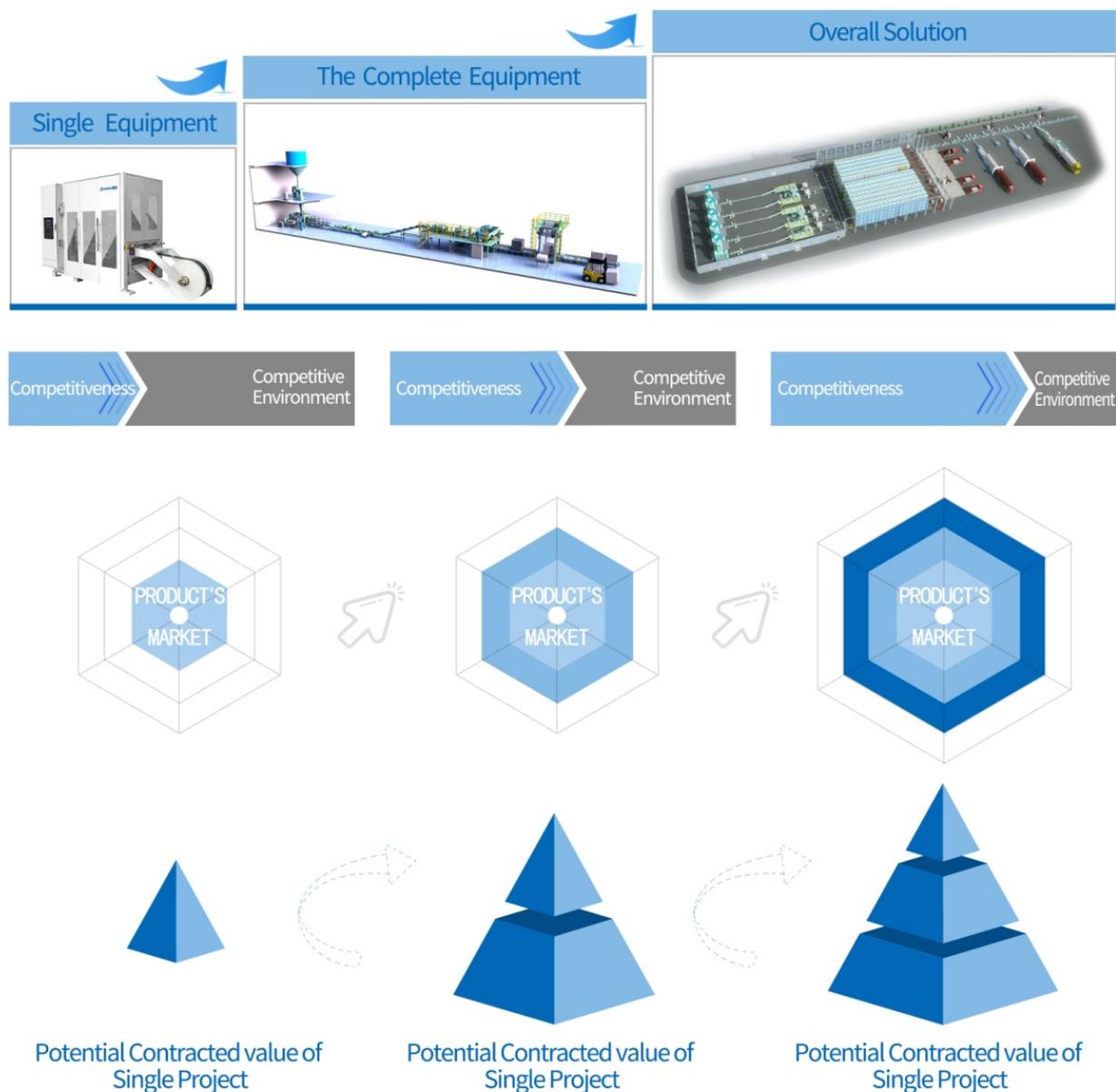
As shown in the figure below:

Single unit sales ( “point” ), it is inevitable to face large competition, small market space, and the project potential contract amount is limited;

The complete equipment sales ( “line” ), the competitive environment improves, the competitive pressure decreases, the market space increases, and the potential contract amount is effectively enlarged;

The overall solution of intelligent manufacturing ( “surface” ), limited competitors, strong competitiveness,

market space and potential contract amount is expected to expand for several times.



Legend: Schematic diagram of the competitive environment and potential market opportunities of single unit equipment, automation production line and overall solution of intelligent manufacturing

For example: in the field of sub-merged arc furnace, the urgent demand for safety production and replacing labors for calcium carbide industry, based on the industrial robot technology, the Company successfully developed and applied (high temperature) sub-merged arc furnace operation robot for calcium carbide which has epoch-making significance to traditional production (“point”), and successively developed ramming robot for calcium carbide, patrolling robot, intelligent pot transfer technology and other key production system (“line”), until forming science and technology innovation ability of an intelligent workshop overall solution that truly subverts the traditional production operations of the industry (“surface”), realizing few men, unmanned factories and intelligent manufacturing. With the Company’s leading technological advantage in the field of calcium carbide sub-merged arc furnace, the Company continues to

develop the application of high temperature special robots in the high temperature furnace operation environment of industrial silicon furnace, silicon manganese, ferrosilicon, etc., committed to multi-dimensional technological innovation and breakthrough, and has successively achieved phased results.

**(6) Smart workshops, smart factories, and overall solutions further enhance the Company's competitiveness.**

On April 7<sup>th</sup> and April 19<sup>th</sup>, 2022, the Company announced that the Company signed contracts with Inner Mongolia Junzheng Chemical Co., Ltd. and Ningxia Younglight Chemicals Co., Ltd. respectively on calcium carbide post-processing intelligent factory and calcium carbide intelligent workshop. The contract amount is RMB 291.1432 million and RMB 69.628 million respectively, 360.7712 million in total. These two projects are the overall intelligent factory projects of the Company's high-temperature special robots as the main equipment application in the field of calcium carbide production, and the market demand of robot and intelligent factory industrialization projects is prosperous. The technology, product R&D and industrialization process from "point", "line" to "surface" have opened the ceiling of the industry growth, and truly realized the historic leap from "0" to "1". In order to facilitate understanding, the following graph shows the intelligent workshop application technology of some calcium carbide sub-merged arc furnace.



Legend: Intelligent production system for calcium carbide



Optimize chassis running and the movement of cloud platform by algorithm, which is suitable for complicated working conditions of calcium carbide furnace inspection; Customers can view the real-time robot screen and inspection results on the Web side.

Legend: Inspection robot dispatching system applied in high temperature sub-merged arc furnace in calcium carbide.



Using deep learning technology, AI recognizes the position and status information of carbide pot trolley, and intelligent crane realizes intelligent lifting and loading of calcium carbide pot with the help of anti-rocking technology.

Legend: AI identification and intelligent lifting and transfer for calcium carbide pot

Taking the intelligent workshop of calcium carbide sub-merged arc furnace as an example, the original traditional production environment has high risk, high temperature, high content of toxic and harmful gases, which is not suitable for manual operation, and the labor supply shortage also poses a hidden danger of production. The Company applies intelligent technologies such as visual recognition, deep learning, robot control algorithm, expert control strategy, combining industrial Internet communication technology to the overall solution of intelligent workshop and intelligent factory, in order to achieve fewer people and

unmanned workshops, relying on intelligent production decision-making management, the Company helps customers to produce safely and efficiently, and promotes the upgrading of intelligent manufacturing industry in related industries. At present, the Company is implementing the intelligent factory of calcium carbide sub-merged arc furnace actively. It can be predicted that if the project can be implemented and delivered smoothly, first of all, it realizes the manual operation of high-tech products to replace the dangerous, harsh and heavy working conditions, promotes the reform of production mode, and improves the safety production welfare of workers, which is of great significance to the calcium carbide industry; Secondly, the overall market space of intelligent factory can form several times and ten times the market size of the original high temperature furnace robot; the technology formed by the overall solution of calcium carbide furnace can be further applied to other fields of silicon manganese, ferrosilicon and industrial silicon furnace, with broader development space to improve economic and social benefits comprehensively.

The Company's ability and leading advantage in the intelligent workshop, the intelligent factory and the overall solution further enhance the competitiveness of the Company.

### **(7) Brand competitiveness**

The Company builds brand with quality, seeks progress with technology, and wins trust with service. Through high-quality products and efficient services, we strive to realize production automation and intelligent manufacturing for customers and achieve win-win cooperation. The Company's brand enjoys a constant leading in popularity, high reputation and customer loyalty in the main domestic product application fields. The Company pursues excellence, leads the development of intelligent equipment in the application industry and builds up a stable, cooperative and win-win customer network for a long time. At the same time, high-quality customer resources and huge potential demand for intelligent manufacturing equipment is the source of the Company's sustainable and rapid development.

### **(8) Achievements in intellectual property, proprietary technology and software copyright.**

During the reporting period, the Company obtained 43 patents approved by the State Intellectual Property Office, including 5 invention patents and 38 utility model patents; 23 software copyrights are approved by the National Copyright Administration. In addition to patent technology, the Company has a considerable amount of core technical know-how that exists in the form of proprietary technology by relying on confidentiality measures. The patents, proprietary technology and software copyright owned and mastered by the Company is the Company's significant core competitiveness. (Note: The amount of intellectual property acquired during the reporting period may have a slight deviation due to the limitation of statistical time points, and is only for investors' trend reference.)

### **(9) Social and economic benefits**

The transformation of traditional industries with high technology is the responsibility and mission given to technological innovation enterprises by the era. The Company's overall solution of intelligent manufacturing in the field of calcium carbide submerged arc furnace and automatic vehicle loading machine widely used in the national economy field have transformative impact on replacing manual operations in high-risk or heavy manual working conditions to achieve safe production and improve production efficiency. Meanwhile,

standardized intelligent equipment operations improve the capacity utilization rate, enhance the enterprise efficiency significantly, and support the early realization of the national double carbons goal.

The Company's large-scale intelligent manufacturing equipment and intelligent factory technology can provide one-stop solution to save more resources and realize safe and efficient production for the customers, fundamentally solve the problem of structural labor gap for customers and promote the improvement of social production efficiency. The application of these high-tech products not only achieves good social benefits, but also brings considerable economic benefits to the Company at the same time.

#### **4. Main Businesses Analysis**

##### **(1) Overview**

In 2022, facing the complex and volatile world political and economic situation, the Chinese economy, with its strong resilience and vitality, effectively responded to the multiple negative factors, continued to maintain growth, and improved the quality of development steadily.

During the reporting period, driven by the expansion of multiple product categories formed by the Company's continuous R&D and product innovation over the years, the market demand was effectively stimulated. Represented by the intelligent factory of calcium carbide sub-merged arc furnace represented by the application of high temperature special operation robots the post processing intelligent manufacturing equipment of solid material for new energy polysilicon raw materials, the Company's marketing work continued to achieve good results. From the perspective of product delivery and revenue confirmation, the operating revenue of intelligent manufacturing equipment and industrial service continued to grow steadily; The operating revenue of energy conservation, emission reduction and environmental protection process and equipment declined; The overall operating revenue was RMB 2.154 billion, increased by 1.93% year-on-year. Affected by the substantial increase of R&D expenses, the decrease of investment income and the actual receipt of software tax rebates, and other factors, the net profit attributed to the parent company's shareholders was RMB 445 million, decreased by 9.24% year-on-year. The Company's weighted average return on equity (ROE) was 14.70%. From the perspective of revenue composition, the Company's intelligent manufacturing equipment, industrial services, environmental protection process and equipment in the overall revenue accounted for 65.88%, 29.67% and 4.45%, respectively.

During the reporting period, the Company increased R&D inputs, implemented "point → line → surface" R&D path, constantly promotes the Company's intelligent manufacturing equipment products market competitiveness. In "robot plus" applications, for example, the Company's formed horizontal expansion application which expended "high temperature calcium carbide special operation robot" plus to "intelligent factory of calcium carbide sub-merged arc furnace", "high temperature calcium carbide special operation robot technology" plus to high temperature operation robot applied in the silicon manganese, silicon, industrial silicon furnace.

In 2022, the market demand of the Company's main intelligent manufacturing equipment product application field presents a thriving scene, and the market sales create the best performance in history. Under the industrial opportunity of the integration of national advanced manufacturing industry and modern service

industry, the Company's industrial service business has grown steadily. In recent years, with the strong demand for intelligent manufacturing in China, the Company's intelligent manufacturing equipment and industrial services will usher in a golden period of vigorous development.

During the reporting period, the main operating data and main financial indicators realized by the Company are listed as follows

Unit: RMB

| Item   | 2022             | 2021             | Year-on-year growth |
|--|------------------|------------------|---------------------|
| Operating revenue  | 2,153,746,152.69 | 2,112,954,813.09 | 1.93%               |
| Operating profit   | 514,097,879.71   | 606,367,149.42   | -15.22%             |
| Total profit   | 512,038,672.63   | 602,667,181.89   | -15.04%             |
| Net profit   | 447,749,302.48   | 519,891,603.82   | -13.88%             |
| There of: Attributable to shareholders of the parent company | 445,038,600.37   | 490,327,299.72   | -9.24%              |

## (2) Operating revenue and cost of sales

### ① Breakdown of operating revenue

Unit: RMB

|  | 2022             |                       | 2021             |                       | Increase/Decrease over the same period of previous year |
|--|------------------|-----------------------|------------------|-----------------------|---|
|  | Amount           | Proportion of revenue | Amount           | Proportion of revenue |   |
| Total  | 2,153,746,152.69 | 100%                  | 2,112,954,813.09 | 100%                  | 1.93%   |
| <b>Categorized by industry</b>   |                  |                       |                  |                       |   |
| Intelligent manufacturing equipment                                    | 1,418,872,768.27 | 65.88%                | 1,266,408,937.97 | 59.94%                | 12.04%  |
| Industrial service   | 639,013,258.02   | 29.67%                | 615,136,150.55   | 29.11%                | 3.88%   |
| Environmental protection process and equipment                         | 95,860,126.40    | 4.45%                 | 231,409,724.57   | 10.95%                | -58.58%   |
| <b>Categorized by product</b>  |                  |                       |                  |                       |   |
| Post-processing intelligent manufacturing equipment for solid material | 944,248,796.84   | 43.84%                | 1,076,067,947.76 | 50.93%                | -12.25%   |
| Post-processing intelligent  | 221,798,420.60   | 10.30%                | 85,341,631.07    | 4.04%                 | 159.89%   |

|  |                  |        |                  |        |         |
|--|------------------|--------|------------------|--------|---------|
| manufacturing equipment for rubber                 |                  |        |                  |        |         |
| Robots plus  | 195,549,679.66   | 9.08%  | 71,266,194.64    | 3.37%  | 174.39% |
| Intelligent logistics, warehousing systems         | 57,275,871.17    | 2.66%  | 33,733,164.50    | 1.60%  | 69.79%  |
| Operation and after-sales type industrial services | 530,485,359.25   | 24.63% | 510,764,252.99   | 24.17% | 3.86%   |
| Supplementary industrial services and others       | 108,527,898.77   | 5.04%  | 104,371,897.56   | 4.94%  | 3.98%   |
| Environmental process and complete equipment       | 95,860,126.40    | 4.45%  | 231,409,724.57   | 10.95% | -58.58% |
| <b>Categorized by region</b>                       |                  |        |                  |        |         |
| Region of east China                               | 880,640,289.07   | 40.89% | 920,045,613.84   | 43.54% | -4.28%  |
| Region of south China                              | 116,994,995.52   | 5.43%  | 80,463,697.92    | 3.81%  | 45.40%  |
| Region of central China                            | 50,027,352.95    | 2.32%  | 68,402,243.85    | 3.24%  | -26.86% |
| Region of north China                              | 337,846,315.45   | 15.69% | 272,848,423.22   | 12.91% | 23.82%  |
| Region of northwest China                          | 505,048,427.65   | 23.45% | 419,504,329.00   | 19.85% | 20.39%  |
| Region of southwest China                          | 94,240,219.62    | 4.38%  | 88,684,181.22    | 4.20%  | 6.26%   |
| Region of northeast China                          | 155,254,832.09   | 7.21%  | 198,464,281.36   | 9.39%  | -21.77% |
| Overseas   | 13,693,720.34    | 0.63%  | 64,542,042.68    | 3.06%  | -78.78% |
| <b>Categorized by sales model</b>                  |                  |        |                  |        |         |
| Direct sales                                       | 2,153,746,152.69 | 100%   | 2,112,954,813.09 | 100%   | 1.93%   |

Note: In the product data category names of the companies in the above table and below, “robot plus” replaces the original classification name of “robot and complete system equipment”. The data classification method does not change, which helps to define the product classification connotation more accurately, and communicate with investors to facilitate more concisely and efficiently.

②Industries, products, regions or distribution model accounting for more than 10% of company revenue or operating profit.

Unit: RMB

|  | Operating revenue | Cost of sales  | Gross profit margin | Operating revenue increase/decrease over the same period of previous year | Cost of sales increased or decreased over the same period of previous year | Gross profit margin increased or decreased over the same period of previous year |
|--|-------------------|----------------|---------------------|---|--|--|
| <b>Categorized by industry</b>   |                   |                |                     |   |  |  |
| Intelligent manufacturing equipment                                    | 1,418,872,768.27  | 850,958,646.60 | 40.03%              | 12.04%  | 11.47%   | 0.31%  |
| Industrial service   | 639,013,258.02    | 470,283,379.64 | 26.40%              | 3.88%   | 7.52%  | -2.49%   |
| Environmental protection process and equipment                         | 95,860,126.40     | 35,470,178.10  | 63.00%              | -58.58%   | -65.44%  | 7.35%  |
| <b>Categorized by product</b>  |                   |                |                     |   |  |  |
| Post-processing intelligent manufacturing equipment for solid material | 944,248,796.84    | 593,042,327.08 | 37.19%              | -12.25%   | -9.38%   | -1.99%   |
| Post-processing intelligent manufacturing equipment for rubber         | 221,798,420.60    | 108,494,545.67 | 51.08%              | 159.89%   | 114.47%  | 10.36%   |
| Robots plus  | 195,549,679.66    | 106,290,073.93 | 45.65%              | 174.39%   | 200.37%  | -4.70%   |
| Intelligent logistics, warehousing systems                             | 57,275,871.17     | 43,131,699.92  | 24.69%              | 69.79%  | 88.07%   | -7.33%   |
| Operation and after-sales type industrial services                     | 530,485,359.25    | 374,863,288.95 | 29.34%              | 3.86%   | 7.34%  | -2.29%   |
| Supplementary industrial services and others                           | 108,527,898.77    | 95,420,090.69  | 12.08%              | 3.98%   | 8.20%  | -3.42%   |
| Environmental process and complete equipment                           | 95,860,126.40     | 35,470,178.10  | 63.00%              | -58.58%   | -65.44%  | 7.35%  |
| <b>Categorized by region</b>   |                   |                |                     |   |  |  |
| Region of east China   | 880,640,289.07    | 524,061,866.43 | 40.49%              | -4.28%  | 0.05%  | -2.58%   |
| Region of south China  | 116,994,995.52    | 74,627,976.08  | 36.21%              | 45.40%  | 42.53%   | 1.28%  |
| Region of central China  | 50,027,352.95     | 28,536,276.51  | 42.96%              | -26.86%   | -34.77%  | 6.92%  |
| Region of north China  | 337,846,315.45    | 214,276,648.47 | 36.58%              | 23.82%  | 27.18%   | -1.67%   |
| Region of northwest China  | 505,048,427.65    | 351,571,278.93 | 30.39%              | 20.39%  | 14.15%   | 3.81%  |

|                                   |                  |                  |        |         |         |        |
|-----------------------------------|------------------|------------------|--------|---------|---------|--------|
| Region of southwest China         | 94,240,219.62    | 62,396,050.17    | 33.79% | 6.26%   | -5.29%  | 8.08%  |
| Region of northeast China         | 155,254,832.09   | 92,169,915.67    | 40.63% | -21.77% | -9.39%  | -8.12% |
| Overseas                          | 13,693,720.34    | 9,072,192.08     | 33.75% | -78.78% | -77.00% | -5.14% |
| <b>Categorized by sales model</b> |                  |                  |        |         |         |        |
| Direct sales                      | 2,153,746,152.69 | 1,356,712,204.34 | 37.01% | 1.93%   | 4.09%   | -1.30% |

Where the Company's statistical criteria for core business data are adjusted during the reporting period, the core business data for the most recent year have been adjusted based on the statistical criteria effective as of the end of the reporting period.

Applicable Not applicable

During the reporting period, the reasons of operating revenue and gross profit rate change are as follows:

**Intelligent manufacturing equipment:** Although the domestic economy was impacted by multiple factors beyond expectation during the reporting period, the overall performance of the Company's intelligent manufacturing equipment reached a new record high, achieving operating revenue of RMB 1.419 billion, a year-on-year growth of 12.04%. With the outstanding competitive advantage of products, the gross profit margin continued to improve, maintaining an excellent level of 40.03%. In specific categories, post-processing intelligent manufacturing equipment for solid material affected by product delivery, achieved operating revenue of RMB 944 million, decreased 12.25% year-on-year; The revenue and profit of post-processing intelligent manufacturing equipment for rubber reached the best level in history, moreover, the Company showed its advantages of large scale complete system in this field, and its revenue increased by 159.89% year-on-year, reaching RMB 222 million; "Robot plus" products with a year-on-year growth rate of 174.39%, rapidly recovered to grow, revenue scale is close to RMB 200 million; The revenue scale of intelligent logistics and warehousing system exceeded RMB 50 million, reaching RMB 57.28 million for the first time, moreover, compared with the number of orders in hand several times to the current revenue, it has great potential for future growth, and its current gross profit rate is also expected to increase.

**Industrial services:** Affected by multiple factors, the operating revenue of industrial services in the reporting period was RMB 639 million, with a year-on-year increase of 3.88%, accounting for 29.67% of the Company's overall revenue; Affected by the negative fluctuation of service performance cost, under this pressure, the gross profit margin of industrial services was 26.40%.

During the reporting period, environmental protection process and equipment were consistent with the expectations in the interim report, and their contribution to the overall performance of the Company decreased significantly, accounting for 4.45% of the Company's revenue, which had a great negative impact on the overall revenue growth of the Company. Its gross profit margin was high affected by high gross profit margin of process package confirmed in the reporting period, and remained at a high level.

From the region perspective, based on the Company's business model, the operating revenue usually varies from period to period, which is mainly affected by demand fluctuations from region to region and structural changes of product demand, as well as Company response demands, completion of product delivery and

acceptance progress, etc. It is not a typical fluctuation of gross profit rate divided by region, please refer to explanation of operating revenue and gross profit rate changes for details.

### (3) Cash Flows

Unit: RMB

| Item   | 2022             | 2021             | Change (%) |
|--|------------------|------------------|------------|
| Sub-total of cash inflows from operating activities  | 2,519,478,243.51 | 2,195,949,278.34 | 14.73%     |
| Sub-total of cash outflows from operating activities | 2,067,946,277.31 | 1,796,176,147.59 | 15.13%     |
| Net cash flows from operating activities             | 451,531,966.20   | 399,773,130.75   | 12.95%     |
| Sub-total of cash inflows from investing activities  | 2,476,439,835.45 | 3,272,188,250.40 | -24.32%    |
| Sub-total of cash outflows from investing activities | 2,751,087,752.50 | 3,262,951,780.24 | -15.69%    |
| Net cash flows from investing activities             | -274,647,917.05  | 9,236,470.16     | -3,073.52% |
| Sub-total of cash inflows from financing activities  | 493,090,000.00   | 25,430,000.00    | 1,839.01%  |
| Sub-total of cash outflows from financing activities | 309,612,826.81   | 253,238,879.24   | 22.26%     |
| Net cash flows from financing activities             | 183,477,173.19   | -227,808,879.24  | 180.54%    |
| Net increase in cash and cash equivalents            | 366,262,667.59   | 176,865,966.98   | 107.08%    |

Explanation of why any of the data above varies significantly:

Applicable Not applicable

①Net cash flows from operating activities is 451.532 million, increases 12.95% compared with which of the same period of last year, mainly affected by the rapid growth of orders, customer advance payments and sales collection.

②Net cash flows from investing activities is -274.6479 million, decreases 3,073.52% compared with which of the same period of last year, mainly due to the impact of cash management activities;

③Net cash flows from financing activities is 183.4772 million, increases 180.54% compared with which of the same period of last year, mainly due to the impact of fund raised from issue of convertible corporate bonds during this period.

Explanation of why net cash flows from operating activities vary significantly from net profit for the reporting period:

Applicable  Not applicable

## 2. Analysis of Assets and Liabilities

### (1) Significant Changes in Asset Composition

Unit: RMB

|                              | 31 December 2022 |                                 | 1 January 2022   |                                 | Increase/<br>Decrease in<br>proportion | Major changes  |
|------------------------------|------------------|---------------------------------|------------------|---------------------------------|--|--|
|                              | Amount           | Proportion<br>of total<br>asset | Amount           | Proportion<br>of total<br>asset |  |  |
| Cash at bank and on hand     | 659,606,109.17   | 10.60%                          | 293,516,532.24   | 5.99%                           | 4.61%                                  | Due to the increase in ending balance of bank deposits.      |
| Accounts receivable          | 856,529,854.29   | 13.77%                          | 686,517,240.24   | 14.00%                          | -0.23%                                 |  |
| Contract assets              | 124,651,440.99   | 2.00%                           | 65,959,231.77    | 1.35%                           | 0.65%                                  | Due to the increase in amount of product warranty.           |
| Inventories                  | 1,912,047,999.38 | 30.74%                          | 1,634,635,126.78 | 33.35%                          | -2.61%                                 |  |
| Investment properties        | 6,373,135.42     | 0.10%                           | 6,765,974.62     | 0.14%                           | -0.04%                                 |  |
| Long-term equity investments | 397,830,998.40   | 6.40%                           | 368,931,927.57   | 7.53%                           | -1.13%                                 |  |
| Fixed assets                 | 192,561,428.46   | 3.10%                           | 227,527,890.89   | 4.64%                           | -1.54%                                 |  |
| Construction in progress     | 27,241,137.26    | 0.44%                           | 0.00             | 0.00%                           | 0.44%                                  | Due to investments in construction projects.                 |
| Right-of-use assets          | 2,349,347.56     | 0.04%                           | 1,536,107.89     | 0.03%                           | 0.01%                                  | Due to the increase in the lease of factory of subsidiaries. |
| Short-term borrowings        | 31,830,000.00    | 0.51%                           | 25,130,000.00    | 0.51%                           | 0.00%                                  |  |
| Contract liabilities         | 1,725,223,007.33 | 27.74%                          | 1,183,763,174.21 | 24.15%                          | 3.59%                                  | Due to increases in orders and prepayments from customers.   |

### Major Assets Overseas

Applicable  Not applicable

**(2) Assets and liabilities measured at fair value**

Unit: RMB

| Item  | Opening balance | Profit or loss from change in fair value during the period | Cumulative fair value change charged to equity | Amount provided for impairment in the period | Purchased in the period | Sold in the period | Other changes | Closing balance  |
|---|-----------------|--|--|--|-------------------------|--------------------|---------------|------------------|
| <b>Financial assets</b>   |                 |  |  |  |                         |                    |               |                  |
| Financial asset held for trading (excluding derivative financial )) | 845,595,470.49  | 5,949,267.94   | 8,954,738.43                                   | 0.00   | 2,552,060,000.00        | 2,135,480,000.00   |               | 1,268,124,738.43 |
| Investments in other equity instruments                             | 54,843,027.56   | 2,634,336.54   | 29,951,048.10                                  | 0.00   | 0.00                    | 0.00               |               | 57,477,364.10    |
| Sub-total of the above  | 900,438,498.05  | 8,583,604.48   | 38,905,786.53                                  | 0.00   | 2,552,060,000.00        | 2,135,480,000.00   |               | 1,325,602,102.53 |
| Financial liabilities   | 0.00            | 0.00   | 0.00   | 0.00   | 0.00                    | 0.00               |               | 0.00             |

**Note: the financial asset held for trading above-mentioned are monetary fund and structural bank deposits, for cash management of temporarily unused self-owned and raised funds, based on the resolution of the Board of Directors and the Board of Shareholders.**

Whether there were any material changes on the measurement attributes of major assets of the company during the reporting period

Yes  No

**(3)Restricted asset rights as of the end of this Reporting Period**

| Item                     | Book value at the end of period(RMB) | Limitation reason   |
|--------------------------|--------------------------------------|---|
| Cash at bank and on hand | 3,006,083.02                         | Bank deposit held on letter of guarantee.   |
| Cash at bank and on hand | 6,800.00                             | Minimum deposit of ETC toll bank account.   |
| Bills receivable         | 6,700,000.00                         | Bank acceptance discount is not terminated for confirmation.  |
| Intangible assets        | 3,972,983.62                         | Land use right used for mortgaged bank loans.   |
| Fixed assets             | 20,015,559.35                        | Mortgage of holding subsidiary Nanjing Green and Boao Environment's real estate to the bank for credit, which used for bank loans or letter of guarantee. |
| <b>Total</b>             | <b>33,701,425.99</b>                 |   |

**3. Investment Made****(1)Total investment amount**

Applicable Not applicable

| Total investment amount of the Reporting Period (RMB) | Total investment amount of the same period of last year (RMB) | Change |
|---|---|--------|
| 397,830,998.40  | 368,931,927.57  | 7.83%  |

The investments above are all investments made by the Company in associates or joint ventures.

**(2)Significant equity investment made in the reporting period**

Applicable Not applicable

**(3)Significant non-equity investments ongoing in the reporting period**

Applicable Not applicable

**(4)Financial investments****①Securities investments**

Applicable Not applicable

No such cases in the reporting period.

## ② Derivatives investments

□ Applicable √ Not applicable

No such cases in the reporting period.

## (5) Use of Raised Funds

## ① Overall usage of funds raised

Unit: RMB'0,000

| Year  | Way of raising                          | Total funds raised        | Total funds used in the Current Period | Accumulative fund used | Total funds with usage changed | Accumulative funds with usage changed | Proportion of accumulative funds with usage changed | Total unused funds | The usage and destination of unused funds  | Amount of funds raised idle for over two years |
|-------|---|---------------------------|--|------------------------|--------------------------------|---------------------------------------|---|--------------------|--|--|
| 2022  | Issuance of convertible corporate bonds | 44,341.86 <sup>Note</sup> | 18,078.85                              | 18,078.85              | 0                              | 0                                     | 0.00%   | 26,399.48          | The Company shall conduct special account management and cash management for the funds not yet used. | 0  |
| Total | --                                      | 44,341.86                 | 18,078.85                              | 18,078.85              | 0                              | 0                                     | 0.00%   | 26,399.48          | --   | 0  |

## Explanation of overall usage of funds raised

As of December 31<sup>st</sup>, 2022, the Company raised fund has used a total amount of RMB180.7885 million (excluding the deducted issuance expenses of RMB 6.5814 million), and the raised funds has not used of RMB 263.9948 million (including income from the cash management of the raised funds). The cash management income included in the unused funds is RMB 1.3647 million.

Note: Total fund raised is the net amount after deducting issuance expenses.

## ② Commitment projects of fund raised

Unit: RMB'0,000

| Committed investment project and super raise fund arrangement                                     | Committed investment amount | Investment amount after adjustment (1) | Investment amount in the reporting period | Accumulative investment amount as of the period-end (2) | Investment schedule as the period-end (3) = (2)/(1) | Date of reaching intended use of the project |
|---|-----------------------------|--|---|---|---|--|
| 1. Robot and intelligent factory industrialization production project.                            | 16,000.00                   | 16,000.00                              | 1,500.98                                  | 1,500.98  | 9.38%   | September 30 <sup>th</sup> , 2024            |
| 2. Sub-merged arc furnace smelting robot and its intelligent factory R & D demonstration project. | 9,000.00                    | 9,000.00                               | 2,842.94                                  | 2,842.94  | 31.59%  | June 30 <sup>th</sup> , 2025                 |
| 3. Project of technology innovation and service center (R&D center)                               | 7,000.00                    | 7,000.00                               | 1,393.07                                  | 1,393.07  | 19.90%  | November 30 <sup>th</sup> , 2023             |
| 4. Supplementary working capital  | 12,341.86                   | 12,341.86                              | 12,341.86                                 | 12,341.86   | 100.00%   | Not applicable                               |
| <b>Total</b>  | <b>44,341.86</b>            | <b>44,341.86</b>                       | <b>18,078.85</b>                          | <b>18,078.85</b>  | <b>--</b>   | <b>--</b>                                    |

**③ Re-purposed raised funds**

Applicable Not applicable

No such cases in the reporting period.

**(6) Related investment progress****① Investment in high-end medical diagnosis and treatment equipment.**

Celiac minimally invasive surgical robot: The celiac minimally invasive surgical robot project of Harbin Si Zhe Rui Smart Medical Equipment Co., Ltd., which is invested and participated by the Company, at the end of reporting period, holds 13.46% of its equity. Electric endoscopic needle forceps (name of registration certificate) has been approved in January, 2021 for medical device registration certificate issued by the State Drug Administration; The intraperitoneal endoscopic surgical system (name of registration certificate) has obtained medical device registration certificate issued by the State Drug Administration in June, 2022.

Image-guided radiotherapy precise positioning: The image-guided radiotherapy precise positioning project of Jiangsu Rayer Medical Technology Co., Ltd., invested by the Company, at the end of reporting period holds its 14.04% equity. The project obtained the registration certificate of IGPS-O, IGPS-V image-guided radiotherapy positioning system issued by the State Food and Drug Administration in March 2016. In February 2020, the Optical Guidance Tracking System (OGTS) has obtained medical device registration certificate issued by the State Drug Administration

Remote assisted minimally invasive pedicle implantation robot: the remote assisted minimally invasive pedicle implantation robot project of Suzhou Zoezen Robot Co., Ltd., invested and participated by a wholly-owned subsidiary of the Company, at the end of reporting period, the Company holds 7.18% of its equity. The main R&D product of the project, Navigation and positioning equipment for spinal surgery has obtained medical device registration certificate issued by the State Drug Administration in February, 2022.

**The field of high-end medical diagnosis and treatment equipment project is characterized by long research and development cycle, high barriers to enter, long product registration cycle, and big clinical risks. There are many risk factors that cannot be determined during type testing and clinical trials. For the registered projects, there is also a risk whether the promotion and industrialization can meet the expectation. Hereby, investors are advised to carefully evaluate the relevant risk factors.**

**② Progress of the robot equity investment fund**

In 2015, the Company participated in the establishment of Dongguan Boshi Ruidexin Robot Equity Investment Fund, and established Dongguan Boshi Ruidexin Robot Equity Investment Center (limited partnership). The total investment of Boshi was RMB 60 million, accounting for 30% of the subscribed investment of the fund. By the end of the reporting period, Boshi had received RMB 60 million of project investment returns and profit distribution, the earnings are good.

### ③ The Progress of enterprises invested by the Company's declare to IPO

Shanghai Bloom Technology Co., Ltd., which is invested by the Company, currently has a registered capital of RMB 50 million. The Company holds 19.20% of its equity and is a non-controlling shareholder. In September 2022, the A-shares IPO application materials of Bloom Technology's on the main board have been officially accepted by the China Securities Regulatory Commission. According to the current policy requirements, it has been transferred to the Shanghai Stock Exchange, and is currently in the review stage of the Shanghai Stock Exchange.

Harbin Sizherui Intelligent Medical Equipment Co., Ltd, which is invested by the Company, currently has a registered capital of RMB 150 million, the Company holds 13.46% of its equity and is a non-controlling shareholder. In October 2022, the application materials of Sizherui Medical's initial public offering and listing on the Science and Technology Innovation Board have been officially accepted by the Shanghai Stock Exchange, and it is currently in the review stage of the Shanghai Stock Exchange

## V. The Company's Outlook for Future Development

### 1. Focus on the intelligent manufacturing industry direction

“Manufacturing is the main body of the national economy, the foundation of building the country, the instrument of rejuvenating the country and the foundation of strengthening the country”, “*The 14<sup>th</sup> Five-Year Plan*” *Intelligent Manufacturing Development Plan*, the “*14<sup>th</sup> Five-Year Plan*” *Robot Industry Development and Plan Implementation Plan of the “robot plus” Application Action* have set China's industrial planning goals by 2025 and 2035. Manufacturing enterprises have broad space for digital, networked and intelligent production, and the robot industry is also facing unprecedented development opportunities.

Since the foundation of the Company in 1997, the Company has been committed to the revitalization and development of the national equipment industry for a long period. The Company successfully developed the handling robot in the early stage of its establishment, and realized the industrial application as early as 2005. The Company has applied industrial robot technology to the field of industrial automation. The Company has independent intellectual property rights of the complete intelligent equipment products to make positive contributions for the large-scale industrial production of customers and the localization of major equipment in the main application fields. The Company's products successfully replacing imported products have realized the independent, controllable, efficient, safe and reliable operation of China's major equipment industry. Over the years, the Company's products are widely used in many fields, has become the first choice of backbone enterprises in the industry.

Entering the 21<sup>st</sup> century, especially in recent years, a new round of scientific and technological revolution and industrial transformation has occurred rapidly. 5G communication network, industrial Internet information technology, new materials, big data, cloud computing, deep learning, artificial intelligence and other digital economy infrastructure technologies have advanced by leaps and bounds, which provide reliable technical support and realization possibility for the Company to accelerate the transformation of products

from “automation” to “digital” and “intelligent”. The Company grasps the opportunity of the times, integrates advanced manufacturing and information technology, and enables the digital, intelligent and green development of manufacturing industry. In recent years, the Company’s main products have realized the expansion from intelligent manufacturing equipment to the digital workshop and intelligent factory, opening the ceiling of the industry growth, marketing work has repeatedly achieved the good results, and the Company’s intelligent manufacturing equipment business has great potential.

Looking forward to the future, the Company will adhere to the market demand oriented, drive technology leading by innovation, ensure the core technology security with independent and controllable means, integrate with social resources, accelerate the Company’s R&D in intelligent manufacturing equipment, expand industrial service business, and promote China’s equipment industry development; Replace manual operation under high-risk and heavy environment, realize intelligent manufacturing production requirement of fewer people, unmanned, safe, efficient and environmental in intelligent equipment application scenarios , drive labor production civilization progress; Contribute to society, return for shareholders, bring well-being for employees, and strive to achieve good and rapid development of the Company.

## **2. The Company focuses on business direction of its development**

The Company actively carries out the research and development, application and promotion of new technologies and new products, improves the intelligent manufacturing level of related industries in the following fields, and leads the coordinated development of the Company’s various businesses.

### **(1) Digital intelligent manufacturing equipment based on 5G and industrial Internet technology**

China is a major manufacturing country, and high-quality industrial development is imminent. Changing the development mode, optimizing the economic structure and transforming the growth drivers have entered a critical period. The rise of brands “Made in China” and the huge potential of domestic demand give us confidence in the future of China’s manufacturing industry.

With the integration and development of industrial Internet technology and machine intelligence technology based on 5G, China’s new industrialization process is accelerating reform. With many years of technical accumulation and industrial practical experience in the field of large-scale intelligent manufacturing equipment, the Company actively expands the application scenarios in the field of intelligent manufacturing.

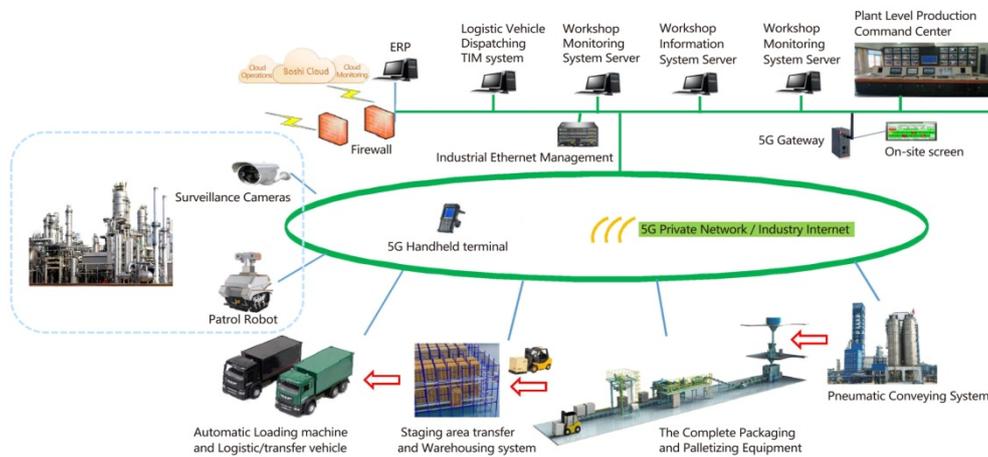
- ① Overall solution of post-processing intelligent manufacturing equipment for solid material.



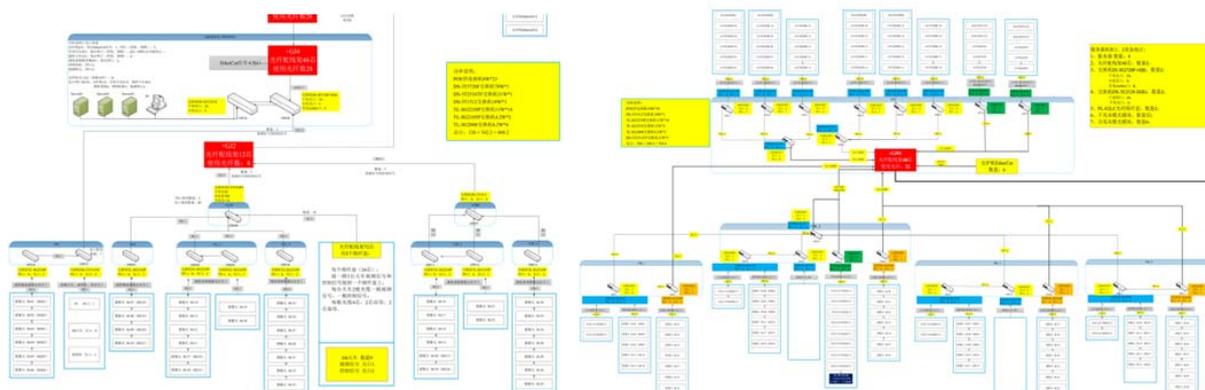
Legend: Schematic diagram for overall solution of post-processing intelligent manufacturing equipment for solid material

The overall solution of post-processing intelligent manufacturing for solid material includes weighing, packaging, palletizing, film hooding, digital outbound & inbound, intelligent loading, and control system and other modules for general and sub-unit operation management, can be widely used in the post-processing application scenarios of powdery materials, granular materials and irregular materials (such as polycrystalline silicon raw materials in the new energy industry), and help the intelligent and efficient production and digital upgrading of relevant industries.

② Overall solution of intelligent factories.



Legend: Schematic diagram for overall solution of intelligent factories



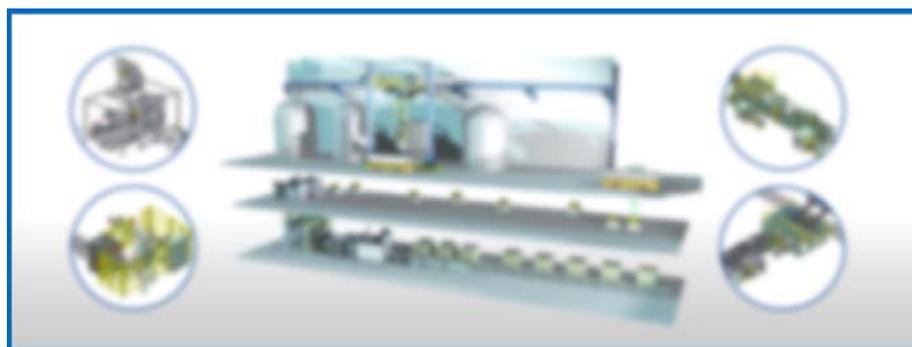
Production Status Monitoring Network, Data Information Network and Real-time Control Network are integrated and logically isolated from each other

Legend: Digital workshop network system diagram

The overall solution of intelligent factory, using multi-disciplinary technology, with intelligent production management decision-making system as the core control unit, helps customers' digital transformation, realizes fewer people, unmanned factories, improves the level and efficiency of intelligent manufacturing, and realizes scientific, independent, economic, safe and efficient production.

③Intelligent manufacturing equipment and intelligent plant solutions covering all categories of polysilicon.

Driven by the Dual-carbon strategy of National "Carbon Peak, Carbon Neutral", China's photovoltaic industry has ushered in a new round of large-scale production capacity release in recent years, and the process of replacing traditional manual operations with intelligent equipment in the industry is in full swing. Since 2019, the Company pioneered packaging equipment for block polysilicon products which is synchronous to apply it in the companies of DAQO Energy Co., Ltd and Xinte Energy Co., Ltd in polysilicon raw material production field, the Company increased investment in R&D, which has formed a series products of gross weight type, net weight type, pre-made bag, FFS in two sectors of block polysilicon and granular polysilicon. The Company will combine the unit system equipment with reducing silicon rod crushing, screening magnetic selection, AGV directional transportation, metering and molding packaging, factory logistics and other processes to initially form an intelligent plant solution. In the field of new energy industry, the Company has cooperated widely with the new energy enterprises such as Xiexin Group, Tongwei Group, Daqo New Energy, Xinte Energy, Asia Silicon, Shanxi Non-ferrous Metals Holding Group, REC Silicon INC, Qinghai Lihao, Ningxia Runergy, etc. In this field, the Company is highly competitive.



Legend: Schematic diagram for intelligent manufacturing equipment and intelligent plant solutions covering all categories of polysilicon.

## (2) “Robot plus” manual substitution under high-risk, heavy and harsh working environment.

In January 2023, the Ministry of Industry and Information Technology, 17 departments jointly issued the *Implementation Plan of the “robot plus” Application Action*. According to the plan, by 2025, the density of manufacturing robots will double from 2020, the application depth and breadth of service robots and special robots will be significantly improved, and the ability of robots to promote high-quality economic and social development will be significantly enhanced. Focusing on the top 10 key application areas led by the manufacturing industry, breaking through more than 100 kinds of robot innovative application technologies and solutions, promoting more than 200 typical robot application scenarios with high technical level, innovative application mode and significant application results, and creating a number of “robot plus” application benchmarking enterprises.

Under the environment of high risk, heavy and harsh working conditions, the hidden trouble of safety production is large. Under the influence of digital economy in the service industry, there is a structural supply and demand dislocation in human resources, and employment problems raised by manufacturing enterprises. These enterprises are limited by manual production, and they are generally faced with difficult problems such as high safety production cost, low degree of operation standardization, unstable product quality, high operation risk and insufficient capacity utilization rate. In the future, the Company will have great potential for high temperature special robots represented by sub-merged arc robots, tamping robots and inspection robots.

### ① Calcium carbide high temperature special operation robot + post-processing intelligent factory for calcium carbide finished product



Legend: Schematic diagram of Sub-merged arc robot and tamping robot replacing manual operation replacing manual operation

The application effect of the Company's self-innovated and developed (high temperature) operation robot and its peripheral system in the field of sub-merged arc furnace of calcium carbide is remarkable, It can completely solve many pain points that cannot be solved by manual operation in traditional discharging link to realize fewer people, unmanned, safe, efficient, environmental intelligent manufacturing production requirements, truly realize the transformation of traditional industries with high-technology, and promote the industrial upgrading of intelligent manufacturing. During the reporting period, the Company has made significant market progress in the direction of intelligent factory of calcium carbide sub-merged arc furnace, and has signed post-processing intelligent factory / workshop contracts of calcium carbide finished products with Inner Mongolia Junzheng Chemical Co., Ltd. and Ningxia Younglight Chemical Co., Ltd., respectively, with a total contract value of RMB 360 million. At present, the Company is actively implementing and striving for the early realization of the first application of industry technological change.

## ② The application of “special operation robot plus of other high temperature operation environment of sub-merged arc furnace.”

On the basis of the successful R&D of high temperature special operation robots in the field of calcium carbide sub-merged arc furnace and the application of intelligent factory technology, the Company continues to develop high temperature special operation robots in the field of silicon manganese, ferrosilicon, industrial silicon furnace and other sub-merged arc furnace, and has achieved phased results.

Silicon manganese sub-merged arc furnace field: The first silicon manganese high-temperature special operation discharging robot has completed the optimization work after the acceptance inspection, and the structural design of a new silicon manganese robot model has been started.

Ferrosilicon sub-merged arc furnace field: For ferrosilicon disk casting system, the first set has been delivered to customers and entered the subsequent market promotion stage, and small-batch orders have been signed; the ferrosilicon high-temperature special operation robot has finalized the product at the application site.

Industrial silicon sub-merged arc furnace field: The first industrial silicon high-temperature special operation discharging robot has been delivered to customers' site and completed site test, and entered the subsequent market promotion stage, and has signed small-batch orders.

High temperature calcium carbide sub-merged arc robot→ calcium carbide tamping robot→ calcium inspection robot→ post-processing intelligent workshop for calcium carbide finished products.

High temperature environment of calcium carbide sub-merged arc furnace → high temperature furnace robots of silicon manganese, ferrosilicon and industrial silicon furnace are expected to form applications of intelligent overall solution in these fields in the future.

The Company's R&D and industrial application of high-temperature special operation robots can effectively open the ceiling of the growth of the industry, and the market space is expanded by several times and ten times, realize the transformation of traditional industries with high-tech products, and truly realize the research and development, demonstration and promotion and application of "robot plus".

### ③ Overall solution of plant intelligent logistics



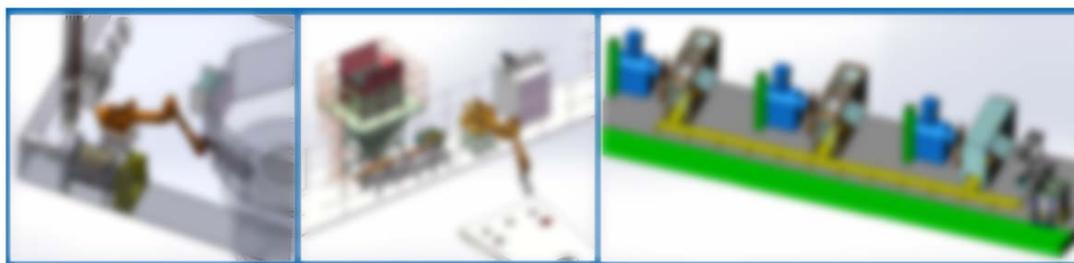
Legend: Partial photos for automatic vehicle loading system

The Company's intelligent logistics system takes the automatic loading system as the core unit, with the visual identification system, data Information interface system, logistics dispatching system, transfer system and the like as the auxiliary, carries on the logistic operation of batch transportation, the stacking, the split, the combination, the loading and the like to many kinds of bags, boxes, bulk materials and so on. Overall solution of intelligent logistics can be widely used in many fields of national economy, which is helpful for customers to concentrate resources, improve their logistics automation ability, improve production efficiency and release production potential. Customers' feedback and market expansion continue to improve. Intelligent logistics solutions, can realize the seamless connection between production line or warehouse and transport vehicles, can be widely used in many areas of the national economy, is conducive to customers concentrated resources, improve production efficiency, release production potential. The advantage is obviously remarkable under the conditions of labor shortage, harsh loading environment, and customers' feedback and

market development continue to improve.

#### ④ The overall solution of steel intelligent manufacturing.

The Company's holding subsidiary Hunan Boshi Automation Equipment Co., Ltd., focuses on intelligent manufacturing equipment technology and product application in the field of steel production, and has made positive progress in iron-making, steel-making, iron water transfer, billet continuous casting and other process links. The Company will actively promote research and development, accelerate product application, accumulate project experience, improve and promote the implementation of intelligent manufacturing solutions in the steel industry.



Legend: Schematic diagram of each unit system of steel intelligent manufacturing solution

#### (3)Industrial service of intelligent equipment and “industrial service plus”

In March 2021, the National Development and Reform Commission, Ministry of Science and Technology, Ministry of Industry and Information Technology, etc. totaling thirteen departments jointly issued *Opinions on Accelerating the High-quality Development of the Manufacturing and Service Industry*. From the strategic planning level, the State put forward that by 2025, the manufacturing service industry will play a significantly enhanced role in improving the quality, benefit, innovation ability and resource allocation efficiency of the manufacturing industry, play a more prominent supporting and leading role in the high-quality development of the manufacturing industry, and realize the coupling symbiosis and integration and development of the manufacturing industry and the manufacturing service industry.

The Company has formulated and implemented the integrated business strategy of products and services, which has achieved remarkable results. The Company's intelligent manufacturing equipment and industrial services have developed into an important source of revenue and profit for the Company. On the one hand, industrial service revenue will increase with the growth of Sales and production operation base of intelligent manufacturing equipment; on the other hand, the Company will rapidly increase service revenue after undertaking new large-scale production and operation service projects. The Company's industrial service business responds positively to customers' deep-level service needs, which will bring continuous, long-term and steady growth of the overall industrial service revenue scale. The Company's integrated industrial services and intelligent manufacturing equipment sales form a benign interaction, promote each other, enhance customer loyalty, and effectively extend the industrial chain. Although the Company's industrial service revenue reached RMB 639 million, continuing to maintain growth, compared with the Company's huge potential customer scale in China, the penetration rate of production integration operation services is still very low, and the future growth potential is huge.

The Company actively strives to complete the national task of “Pilot unit for integrated development of advanced manufacturing and modern service industry”, explores new models and new paths, accumulates experience, and promotes the rapid development of “integration of two industries” in China with performance.

The Company’s industrial services have covered all regions except Hong Kong, Macau, Taiwan and Tibet, with an industrial service network and industrial service capacity of more than 2,600 service personnel. At present, the Company’s industrial service network mainly serves the Company’s product customers. While contributing considerable income and profits to the Company, the commercial value of the Company’s industrial service network resources is paid attention to by more and more customers and foreign-owned enterprise groups.

The Company’s industrial service network and service capability, have the possibility to undertake industrial service business opportunities other than the Company’s products to achieve the “industrial service plus”, the future is worth expecting.

### **3. Business Outlook in 2023**

Since 2017, the Company has continuously increased the investment in R&D of product technology, realized the expansion of multiple product categories, and met the strong market demand well. The operating performance has shown a sustained and rapid growth trend, and the operating revenue has successively stood at a new level of 1 billion and 2 billion.

In 2022, although China’s economic development suffered multiple, uncontrollable and negative factors, the Company was affected in product delivery and revenue confirmation, however, with the help of continuous research and development and product innovation, marketing, whether in traditional business sector, or in the robot and intelligent factory sector, as well as the new energy intelligent manufacturing equipment sector, has achieved the historical best success, and the orders are abundant and the performance is expecting.

Looking forward to 2023, the market demand and orders will continue to maintain a strong momentum of development, and the Company has the foundation, the ability and the confidence to achieve the overall growth of operating performance.

### **4. Risks Facing by the Company**

(1) The risk that the R&D of intelligent manufacturing equipment and industrialization process are less than expected.

The Company has the capability to provide customers with overall solutions of intelligent manufacturing in the main equipment application field of complete large scale intelligent equipment. “Manufacturing is the main body of the national economy, the foundation of building the country, the instrument of rejuvenating the country and the foundation of strengthening the country.” China is undergoing a “transformation from big manufacturing country to powerful manufacturing country” , and the demand for digital and intelligent

factories is on the rise. “ *Intelligent Manufacturing Development Plan of the 14<sup>th</sup> Five-year Plan* ” clearly expresses “In the 14<sup>th</sup> Five-year Plan and for a long period in the future, the promotion of intelligent manufacturing should be based on the essence of manufacturing, closely follow the characteristics of intelligence, take process equipment as the core, take data as the basis, rely on manufacturing units, workshops, factories and supply chains and other carriers to promote the digital transformation of manufacturing industry, network coordination and intelligent transformation. By 2025, most manufacturing enterprises above designated size will realize digital networking, and backbone enterprises in key industries will initially apply intelligence; By 2035, manufacturing enterprises above designated size will fully popularize digital networking, and backbone enterprises in key industries will basically realize intelligence.” In the face of huge demand prospect, if the Company cannot expand the application field of new technology in time, or the industrialization process is not expected, the Company may miss the best opportunity to enter the new industry, which will bring an adverse impact on the medium- and long-term development of the Company and become one of the risk factors faced by the Company.

(2) The risk that 5G-based industrial internet and artificial intelligence technology cannot be deeply applied in the Company’s overall solution of intelligent manufacturing.

After years of technical accumulation, as well as the rich multi-category product lines, the Company can provide customers with the intelligent manufacturing overall solutions in the main product application fields. Intelligent manufacturing technology is inseparable from industrial Internet technology. The application of 5G in the industrial field provides technological convenience for human-machine collaboration and intelligent manufacturing. Although the Company has a prominent competitive advantage in the field of Product application, if the deep integration and application of 5G-based industrial Internet and artificial intelligence technology cannot be used in product technology solutions in the future, it will restrict the speed and quality of the Company’s medium and long-term development and constitute one of the risk factors.

(3) The risk of whether the Company can effectively integrate its own and social resources and accelerate technological innovation.

As a technology-oriented enterprise, the Company replaces the imported equipment or makes the first set of innovative applications with the continuous technology lead and technology differentiation strategy in the field where the Company is engaged in to maintain the dominant competitive position for a long time. However, in the face of the rapid development of industrial Internet, artificial intelligence technology, as well as the fierce resource competition among enterprises, the development of enterprises should not stay on the use of internal resources. For example, in the field of intelligent manufacturing overall solutions, non-core and sufficient market competition units can directly connect with social resources, select the best, and integrate with the Company’s core technologies, helping to accelerate the research and development process of products and technologies, and strive for market opportunities. If the Company fails to effectively give full play to its own advantages, integrate social resources, and accelerate the innovative application of product technology, it will constitute one of the risk factors restricting the medium-term and long-term development of the Company.

(4) The risk that “robot plus” and China intelligent equipment demand is less than expected.

In recent years, the State has intensively issued *the 2025 and 2035 China intelligent manufacturing industry development planning goals and robot plus application action implementation plan*. As the dominant enterprise, the Company represents the domestic leading level in the field of product application, and some products are leading in the world. The national intelligent manufacturing industry related plan will take the lead to implement in the advantageous enterprises in the industry, and the Company will face many development opportunities in the future. However, China “faces many difficulties and challenges in its development, increasing uncertainties in the external environment, global inflation is still high, the momentum of world economic and trade growth is weakening, and external repression and containment are rising”. These factors or unforeseeable factors affect China’s demand for high-end intelligent manufacturing equipment in the future, constitute one of the risk factors restricting the Company’s medium and long-term performance.

(5) The risk of technology confidentiality and unfair competition.

Technology leading is one of the important competitive strategies and competitive advantages of the Company. The technology leading advantage of the products directly affects whether the Company’s products can maintain a high level of sustainable profitability and the effective implementation of the Company’s differentiated competitive strategy. The Company attaches great importance to the job of technology confidentiality by applying for intellectual property protection, strengthening legal rights protection, and protecting the Technology security of enterprises and preventing related risks through technical means. Nevertheless, there are still intellectual property rights owned by the Company illegally stolen, and other risks of unfair competition, which may cause potential economic losses to the Company.

**VI. Financial statements****(1) Consolidated Balance Sheet**

Prepared by HARBIN BOSHI AUTOMATION CO., LTD.

Unit: RMB

| Item                                   | Dec 31, 2022            | Jan 1, 2022             |
|--|-------------------------|-------------------------|
| <b>Current assets:</b>                 |                         |                         |
| Cash at bank and on hand               | 659,606,109.17          | 293,516,532.24          |
| Financial assets held for trading      | 1,268,124,738.43        | 845,595,470.49          |
| Derivative financial assets            |                         |                         |
| Bills receivable                       | 307,322,625.28          | 229,646,179.07          |
| Accounts receivable                    | 856,529,854.29          | 686,517,240.24          |
| Financing receivables                  | 111,064,333.27          | 79,149,044.16           |
| Prepayments                            | 139,594,005.25          | 122,894,199.23          |
| Other receivables                      | 29,316,161.67           | 15,263,337.81           |
| Thereof: Interest receivable           |                         |                         |
| Dividend receivable                    | 2,601,281.28            |                         |
| Inventories                            | 1,912,047,999.38        | 1,634,635,126.78        |
| Contract assets                        | 124,651,440.99          | 65,959,231.77           |
| Assets held for sale                   |                         |                         |
| Non-current assets due within one year |                         |                         |
| Other current assets                   | 8,781,928.47            | 102,006,478.67          |
| <b>Total current assets</b>            | <b>5,417,039,196.20</b> | <b>4,075,182,840.46</b> |
| <b>Non-current assets:</b>             |                         |                         |
| Debt investments                       |                         |                         |
| Other debt investments                 |                         |                         |
| Long-term receivables                  |                         |                         |
| Long-term equity investments           | 397,830,998.40          | 368,931,927.57          |
| Other equity instruments investments   | 57,477,364.10           | 54,843,027.56           |
| Other non-current financial assets     |                         |                         |
| Investment properties                  | 6,373,135.42            | 6,765,974.62            |
| Fixed assets                           | 192,561,428.46          | 227,527,890.89          |
| Construction in progress               | 27,241,137.26           |                         |
| Productive biological assets           |                         |                         |

|   |                         |                         |
|---|-------------------------|-------------------------|
| Oil and gas assets                          |                         |                         |
| Right-of-use assets                         | 2,349,347.56            | 1,536,107.89            |
| Intangible assets                           | 57,090,300.02           | 59,203,985.82           |
| Development costs                           |                         |                         |
| Goodwill                                    | 1,120,909.26            | 57,640,668.16           |
| Long-term deferred expenses                 | 84,955.75               |                         |
| Deferred tax assets                         | 40,346,009.83           | 33,545,799.43           |
| Other non-current assets                    | 20,759,073.65           | 16,767,197.42           |
| <b>Total non-current assets</b>             | <b>803,234,659.71</b>   | <b>826,762,579.36</b>   |
| <b>Total assets</b>                         | <b>6,220,273,855.91</b> | <b>4,901,945,419.82</b> |
| <b>Current liabilities:</b>                 |                         |                         |
| Short-term loans                            | 31,830,000.00           | 25,130,000.00           |
| Financial liabilities held for trading      |                         |                         |
| Derivative financial liabilities            |                         |                         |
| Bills payable                               |                         |                         |
| Accounts payable                            | 227,581,839.47          | 169,654,369.55          |
| Advances from customers                     | 96,750.00               | 93,199.97               |
| Contract liabilities                        | 1,725,223,007.33        | 1,183,763,174.21        |
| Employee benefits payable                   | 70,475,565.86           | 55,640,882.93           |
| Taxes payable                               | 54,028,725.59           | 50,017,507.87           |
| Other payables                              | 3,035,031.46            | 1,310,296.34            |
| Thereof: Interest payable                   |                         |                         |
| Dividend payable                            |                         |                         |
| Liabilities held for sale                   |                         |                         |
| Non-current liabilities due within one year | 2,097,594.87            | 15,584,251.66           |
| Other current liabilities                   | 119,463,543.08          | 87,335,615.64           |
| <b>Total current liabilities</b>            | <b>2,233,832,057.66</b> | <b>1,588,529,298.17</b> |
| <b>Non-current liabilities:</b>             |                         |                         |
| Long-term loans                             |                         |                         |
| Bonds payable                               | 415,824,511.11          |                         |
| Thereof: Preference shares                  |                         |                         |
| Perpetual debts                             |                         |                         |
| Lease liabilities                           |                         | 364,078.19              |
| Long-term payable                           |                         | 6,000,000.00            |

|   |                         |                         |
|---|-------------------------|-------------------------|
| Long-term employee benefits payable                             |                         |                         |
| Provisions  | 5,195,263.40            | 4,202,180.70            |
| Deferred income   | 4,781,549.13            | 8,369,857.05            |
| Deferred tax liabilities  | 14,377,363.26           | 13,350,055.20           |
| Other non-current liabilities                                   | 199,568,192.56          | 233,253,274.34          |
| <b>Total non-current liabilities</b>                            | <b>639,746,879.46</b>   | <b>265,539,445.48</b>   |
| <b>Total liabilities</b>  | <b>2,873,578,937.12</b> | <b>1,854,068,743.65</b> |
| <b>Shareholders' equity:</b>                                    |                         |                         |
| Share capital   | 1,022,550,000.00        | 1,022,550,000.00        |
| Other equity instruments  | 32,103,507.97           |                         |
| Thereof: Preference shares                                      |                         |                         |
| Perpetual debts   |                         |                         |
| Capital reserve   | 226,083,353.77          | 168,298,491.29          |
| Less: treasury shares   |                         |                         |
| Other comprehensive income                                      | 22,852,245.26           | 15,452,263.61           |
| Specific reserve  | 29,243,725.77           | 26,141,271.69           |
| Surplus reserve   | 300,522,057.11          | 255,493,157.09          |
| General risk reserve  |                         |                         |
| Retained earnings   | 1,536,230,123.06        | 1,391,857,922.71        |
| Total equity attributable to shareholders of the parent company | 3,169,585,012.94        | 2,879,793,106.39        |
| Minority shareholder equity                                     | 177,109,905.85          | 168,083,569.78          |
| <b>Total shareholders' equity</b>                               | <b>3,346,694,918.79</b> | <b>3,047,876,676.17</b> |
| <b>Total liabilities and shareholders' equity</b>               | <b>6,220,273,855.91</b> | <b>4,901,945,419.82</b> |

Legal representative: Deng Xijun

Director of Finance: Sun Zhiqiang

Prepared by: Wang Peihua

**(2) Balance Sheet of Parent Company**

Unit: RMB

| Item                              | Dec 31, 2022     | Jan 1, 2022    |
|-----------------------------------|------------------|----------------|
| <b>Current assets:</b>            |                  |                |
| Cash at bank and on hand          | 558,638,558.10   | 231,349,019.86 |
| Financial assets held for trading | 1,067,854,254.08 | 781,841,534.53 |
| Derivative financial assets       |                  |                |
| Bills receivable                  | 247,221,244.29   | 213,879,097.43 |
| Accounts receivable               | 799,216,696.68   | 623,091,820.39 |

|  |                         |                         |
|--|-------------------------|-------------------------|
| Financing receivables                  | 89,925,115.89           | 62,227,683.22           |
| Prepayments                            | 110,843,454.45          | 103,997,118.75          |
| Other receivables                      | 22,537,149.02           | 12,089,893.45           |
| Thereof: Interest receivable           |                         |                         |
| Dividend receivable                    | 2,601,281.28            |                         |
| Inventories                            | 1,594,443,554.27        | 1,365,863,929.52        |
| Contract assets                        | 123,540,319.09          | 61,464,107.44           |
| Assets held for sale                   |                         |                         |
| Non-current assets due within one year |                         |                         |
| Other current assets                   | 14,227,088.07           | 84,086,902.47           |
| <b>Total current assets</b>            | <b>4,628,447,433.94</b> | <b>3,539,891,107.06</b> |
| <b>Non-current assets:</b>             |                         |                         |
| Debt investments                       |                         |                         |
| Other debt investments                 |                         |                         |
| Long-term receivables                  |                         |                         |
| Long-term equity investments           | 740,518,264.70          | 510,619,193.87          |
| Other equity instruments investments   | 27,117,364.10           | 24,483,027.56           |
| Other non-current financial assets     |                         |                         |
| Investment properties                  |                         |                         |
| Fixed assets                           | 152,430,504.15          | 167,587,260.49          |
| Construction in progress               | 21,429,854.11           |                         |
| Productive biological assets           |                         |                         |
| Oil and gas assets                     |                         |                         |
| Right-of-use assets                    | 441,271.74              | 653,082.18              |
| Intangible assets                      | 37,605,591.40           | 36,724,254.11           |
| Development costs                      |                         |                         |
| Goodwill                               |                         |                         |
| Long-term deferred expenses            | 84,955.75               |                         |
| Deferred tax assets                    | 24,156,362.90           | 25,151,630.69           |
| Other non-current assets               | 11,463,555.05           | 15,847,197.42           |
| <b>Total non-current assets</b>        | <b>1,015,247,723.90</b> | <b>781,065,646.32</b>   |
| <b>Total assets</b>                    | <b>5,643,695,157.84</b> | <b>4,320,956,753.38</b> |
| <b>Current liabilities:</b>            |                         |                         |
| Short-term loans                       |                         |                         |

|   |                         |                         |
|---|-------------------------|-------------------------|
| Financial liabilities held for trading      |                         |                         |
| Derivative financial liabilities            |                         |                         |
| Bills payable                               |                         |                         |
| Accounts payable                            | 264,814,384.36          | 163,506,047.84          |
| Advances from customers                     |                         |                         |
| Contract liabilities                        | 1,571,364,637.48        | 1,076,132,534.39        |
| Employee benefits payable                   | 48,097,569.96           | 45,727,674.42           |
| Taxes payable                               | 37,236,011.40           | 45,300,625.00           |
| Other payables                              | 7,650,725.57            | 5,531,624.08            |
| Thereof: Interest payable                   |                         |                         |
| Dividend payable                            |                         |                         |
| Liabilities held for sale                   |                         |                         |
| Non-current liabilities due within one year | 802,551.69              | 201,250.11              |
| Other current liabilities                   | 104,756,129.31          | 82,008,840.39           |
| <b>Total current liabilities</b>            | <b>2,034,722,009.77</b> | <b>1,418,408,596.23</b> |
| <b>Non-current liabilities:</b>             |                         |                         |
| Long-term loans                             |                         |                         |
| Bonds payable                               | 415,824,511.11          |                         |
| Thereof: Preference shares                  |                         |                         |
| Perpetual debts                             |                         |                         |
| Lease liabilities                           |                         | 209,114.67              |
| Long-term payable                           |                         | 6,000,000.00            |
| Long-term employee benefits payable         |                         |                         |
| Provisions                                  | 4,667,743.14            | 3,996,091.20            |
| Deferred income                             | 4,781,549.13            | 8,369,857.05            |
| Deferred tax liabilities                    | 7,779,159.10            | 7,297,242.43            |
| Other non-current liabilities               | 117,066,270.00          | 107,151,867.52          |
| <b>Total non-current liabilities</b>        | <b>550,119,232.48</b>   | <b>133,024,172.87</b>   |
| <b>Total liabilities</b>                    | <b>2,584,841,242.25</b> | <b>1,551,432,769.10</b> |
| <b>Shareholders' equity:</b>                |                         |                         |
| Share capital                               | 1,022,550,000.00        | 1,022,550,000.00        |
| Other equity instruments                    | 32,103,507.97           |                         |
| Thereof: Preference shares                  |                         |                         |
| Perpetual debts                             |                         |                         |

|   |                         |                         |
|---|-------------------------|-------------------------|
| Capital reserve                                   | 225,950,067.05          | 168,288,785.47          |
| Less: treasury shares                             |                         |                         |
| Other comprehensive income                        | 7,976,982.26            | 5,369,127.17            |
| Specific reserve                                  | 24,341,652.67           | 22,035,866.22           |
| Surplus reserve                                   | 300,522,057.11          | 255,493,157.09          |
| Retained earnings                                 | 1,445,409,648.53        | 1,295,787,048.33        |
| <b>Total shareholders' equity</b>                 | <b>3,058,853,915.59</b> | <b>2,769,523,984.28</b> |
| <b>Total liabilities and shareholders' equity</b> | <b>5,643,695,157.84</b> | <b>4,320,956,753.38</b> |

**(3) Consolidated Income Statement**

Unit: RMB

| Item   | 2022             | 2021             |
|--|------------------|------------------|
| 1. Total revenue   | 2,153,746,152.69 | 2,112,954,813.09 |
| Thereof : Operating revenue  | 2,153,746,152.69 | 2,112,954,813.09 |
| 2. Total cost  | 1,692,891,233.52 | 1,606,585,515.83 |
| Thereof : cost of sales  | 1,356,712,204.34 | 1,303,411,602.34 |
| Taxes and surcharges   | 23,327,068.38    | 18,517,384.66    |
| Selling and distribution expenses                                      | 94,505,120.53    | 85,543,508.38    |
| General and administrative expenses                                    | 112,797,769.70   | 111,279,233.98   |
| Research and development expenses                                      | 118,689,704.65   | 88,753,584.15    |
| Financial expenses   | -13,140,634.08   | -919,797.68      |
| Thereof : Interest expenses  | 4,058,577.85     | 1,497,144.62     |
| Interest income  | 12,172,849.27    | 5,851,744.39     |
| Add: Other income  | 62,253,301.72    | 71,574,326.06    |
| Investment income ("-" for losses)                                     | 6,439,111.38     | 53,508,336.66    |
| Thereof: Income from investment in associates and joint ventures       | 4,918,671.51     | 28,651,229.34    |
| Gain from derecognition of financial assets measured at amortized cost |                  |                  |
| Exchange income (Loss is listed with "-")                              |                  |                  |
| Net exposure hedging gains ("-" for losses)                            |                  |                  |
| Gains from changes in fair value ("-" for losses)                      | 5,644,531.71     | -1,589,248.11    |
| Credit impairment losses ("-" for losses)                              | -517,545.77      | -5,811,944.82    |
| Impairment losses ("-" for losses)                                     | -20,456,984.96   | -16,815,163.35   |
| Gains from assets disposal ("-" for losses)                            | -119,453.54      | -868,454.28      |

|   |                |                |
|---|----------------|----------------|
| 3. Operating profit ("-" for losses)  | 514,097,879.71 | 606,367,149.42 |
| Add: Non-operating income   | 10,006.77      | 81,855.21      |
| Less: Non-operating expenses  | 2,069,213.85   | 3,781,822.74   |
| 4. Profit before income tax ("-" for losses)  | 512,038,672.63 | 602,667,181.89 |
| Less: Income tax expenses   | 64,289,370.15  | 82,775,578.07  |
| 5. Net profit for the year ("-" for net losses)   | 447,749,302.48 | 519,891,603.82 |
| (1) Classification according to operation continuity  |                |                |
| Net profit from continuing operations(loss is stated with "-")  | 447,749,302.48 | 519,891,603.82 |
| Net profit from discontinued operations(loss is stated with "-")  |                |                |
| (2) Classified by ownership of the equity   |                |                |
| Attributable to shareholders of the parent company  | 445,038,600.37 | 490,327,299.72 |
| Minority interests  | 2,710,702.11   | 29,564,304.10  |
| 6. Other comprehensive income, net of tax   | 570,551.72     | 2,284,828.34   |
| Other comprehensive income attributable to shareholders of the Parent Company, net of tax                         | 1,568,830.37   | 8,338,434.77   |
| (1) Other comprehensive income items which will not be reclassified subsequently to profit or loss                | 2,239,186.05   | 15,630,573.43  |
| 1) Changes arising from re-measurement of defined benefit plan  |                |                |
| 2) Other comprehensive income that will not be transferred subsequently to profit or loss under the equity method |                |                |
| 3) Changes in the fair value of the investment in other equity instruments  | 2,239,186.05   | 15,630,573.43  |
| 4) Changes in the fair value of the Company's own credit risk   |                |                |
| 5) Others   |                |                |
| (2) Other comprehensive income items which will be reclassified subsequently to profit or loss                    | -670,355.68    | -7,292,138.66  |
| 1) Other comprehensive income that will be transferred subsequently to profit or loss under the equity method     | 368,669.04     |                |
| 2) Changes in the fair value of other debt investments  |                |                |
| 3) Amount of financial assets reclassified and included in other comprehensive income                             |                |                |
| 4) Credit impairment reserves for other debt investment   |                |                |
| 5) Cash flow hedging reserve  |                |                |
| 6) Translation differences arising from translation of foreign currency financial statements                      | -1,039,024.72  | -7,292,138.66  |

|  |                |                |
|--|----------------|----------------|
| 7)Others   |                |                |
| Other comprehensive income attributable to minority shareholders, net of tax | -998,278.65    | -6,053,606.43  |
| 7. Total comprehensive income  | 448,319,854.20 | 522,176,432.16 |
| Attributable to shareholders of the parent company                           | 446,607,430.74 | 498,665,734.49 |
| Minority interests   | 1,712,423.46   | 23,510,697.67  |
| 8. Earnings per share  |                |                |
| (1) Basic earnings per share   | 0.4352         | 0.4795         |
| (2) Diluted earnings per share   | 0.4352         | 0.4795         |

Legal representative: Deng Xijun      Director of Finance: Sun Zhiqiang      Prepared by: Wang Peihua

#### (4)Income Statement of Parent Company

Unit: RMB

| Item   | 2022             | 2021             |
|--|------------------|------------------|
| 1. Total revenue   | 1,932,734,317.76 | 1,776,631,649.81 |
| Less: cost of sales  | 1,234,004,746.10 | 1,137,531,815.19 |
| Taxes and surcharges   | 19,866,883.67    | 16,606,349.16    |
| Selling and distribution expenses                                      | 83,597,686.21    | 70,315,541.65    |
| General and administrative expenses                                    | 66,493,794.43    | 63,840,051.35    |
| Research and development expenses                                      | 93,261,725.64    | 70,022,646.60    |
| Financial expenses   | -6,772,167.40    | -7,790,596.13    |
| Thereof : Interest expenses  | 4,425,200.49     | 1,617.96         |
| Interest income  | 12,013,931.84    | 5,812,277.72     |
| Add: Other income  | 59,251,335.18    | 67,049,026.22    |
| Investment income ("-" for losses)                                     | 19,273,052.93    | 60,220,154.32    |
| Thereof: Income from investment in associates and joint ventures       | 4,918,671.51     | 28,651,229.34    |
| Gain from derecognition of financial assets measured at amortized cost |                  |                  |
| Net exposure hedging gains ("-" for losses)                            |                  |                  |
| Gains from changes in fair value ("-" for losses)                      | 5,290,952.07     | -1,988,979.88    |
| Credit impairment losses ("-" for losses)                              | 1,116,645.57     | -7,154,301.92    |
| Impairment losses ("-" for losses)                                     | -10,042,924.16   | -13,840,196.01   |
| Gains from assets disposal ("-" for losses)                            | -154,906.34      | -868,454.28      |
| 2. Operating profit ("-" for losses)                                   | 517,015,804.36   | 529,523,090.44   |

|   |                |                |
|---|----------------|----------------|
| Add: Non-operating income   | 2.87           | 77,029.66      |
| Less: Non-operating expenses  | 1,943,035.51   | 2,372,582.71   |
| 3. Profit before income tax ("-" for losses)  | 515,072,771.72 | 527,227,537.39 |
| Less: Income tax expenses   | 64,783,771.50  | 67,640,500.50  |
| 4. Net profit for the year ("-" for net losses)   | 450,289,000.22 | 459,587,036.89 |
| Net profit from continuing operations (loss is stated with "-")   | 450,289,000.22 | 459,587,036.89 |
| Net profit from discontinued operations (loss is stated with "-")   |                |                |
| 5. Other comprehensive income, net of tax   | 2,607,855.09   | 5,369,127.17   |
| (1) Other comprehensive income items which will not be reclassified subsequently to profit or loss                | 2,239,186.05   | 6,360,573.43   |
| 1) Changes arising from remeasurement of defined benefit plan   |                |                |
| 2) Other comprehensive income that will not be transferred subsequently to profit or loss under the equity method |                |                |
| 3) Changes in the fair value of the investment in other equity instruments  | 2,239,186.05   | 6,360,573.43   |
| 4) Changes in the fair value of the Company's own credit risk   |                |                |
| 5) Others   |                |                |
| (2) Other comprehensive income items which will be reclassified subsequently to profit or loss                    | 368,669.04     | -991,446.26    |
| 1) Other comprehensive income that will be transferred subsequently to profit or loss under the equity method     | 368,669.04     |                |
| 2) Changes in the fair value of other debt investments  |                |                |
| 3) Amount of financial assets reclassified and included in other comprehensive income                             |                |                |
| 4) Credit impairment reserves for other debt investment   |                |                |
| 5) Cash flow hedging reserve  |                |                |
| 6) Translation differences arising from translation of foreign currency financial statements                      |                | -991,446.26    |
| 7) Others   |                |                |
| 6. Total comprehensive income   | 452,896,855.31 | 464,956,164.06 |
| 7. Earnings per share   |                |                |
| (1) Basic earnings per share  |                |                |
| (2) Diluted earnings per share  |                |                |

**(5) Consolidated Cash Flow Statement**

Unit: RMB

| Item  | 2022             | 2021             |
|---|------------------|------------------|
| <b>1. Cash flows from operating activities</b>  |                  |                  |
| Cash received from sales of goods or rendering of services                                    | 2,440,433,896.16 | 2,109,481,032.52 |
| Refund of taxes and surcharges  | 47,645,190.27    | 63,915,107.96    |
| Other cash receipts relating to operating activities  | 31,399,157.08    | 22,553,137.86    |
| Sub-total of cash inflows from operating activities   | 2,519,478,243.51 | 2,195,949,278.34 |
| Cash paid for goods and services  | 1,256,546,781.63 | 1,091,852,260.00 |
| Cash paid to employees and paid on behalf of employees  | 442,729,532.89   | 375,628,793.53   |
| Payments of taxes and surcharges  | 245,464,627.58   | 207,710,364.96   |
| Other cash payments relating to operating activities  | 123,205,335.21   | 120,984,729.10   |
| Sub-total of cash outflows from operating activities  | 2,067,946,277.31 | 1,796,176,147.59 |
| Net cash flows from operating activities  | 451,531,966.20   | 399,773,130.75   |
| <b>2. Cash flows from investing activities</b>  |                  |                  |
| Cash received from withdrawing investments  | 2,365,387,000.00 | 3,243,591,953.39 |
| Cash received from investment income  | 31,586,059.33    | 27,384,251.30    |
| Net cash received from disposal of fixed assets, intangible assets and other long term assets | 132,632.26       | 1,212,045.71     |
| Net cash received from disposal of subsidiaries and other operating units                     | 78,281,750.36    |                  |
| Other cash receipts relating to investing activities  | 1,052,393.50     |                  |
| Sub-total of cash inflows from investing activities   | 2,476,439,835.45 | 3,272,188,250.40 |
| Cash paid to acquire fixed assets, intangible assets and other long-term assets               | 54,027,752.50    | 25,044,760.67    |
| Cash paid to acquire investments  | 2,697,060,000.00 | 3,235,040,000.00 |
| Net increase of mortgaged loans   |                  |                  |
| Net cash paid to acquire subsidiaries and other operating units                               |                  | 1,027,019.57     |
| Other cash payments relating to investing activities  |                  | 1,840,000.00     |
| Sub-total of cash outflows from investing activities  | 2,751,087,752.50 | 3,262,951,780.24 |
| Net cash flows from investing activities  | -274,647,917.05  | 9,236,470.16     |
| <b>3. Cash flows from financing activities</b>  |                  |                  |
| Cash received from capital contributions  | 1,130,000.00     | 300,000.00       |
| Thereof: Cash received by subsidiaries from minority shareholders' capital contributions      | 1,130,000.00     | 300,000.00       |

|   |                |                 |
|---|----------------|-----------------|
| Cash received from borrowings   | 40,760,000.00  | 25,130,000.00   |
| Cash received from issuing bonds  | 450,000,000.00 |                 |
| Other cash receipts from financing activities   | 1,200,000.00   |                 |
| Sub-total of cash inflows from financing activities                                     | 493,090,000.00 | 25,430,000.00   |
| Cash repayments of borrowings   | 44,060,000.00  | 39,209,395.45   |
| Distribution of dividends or profits and payments for interest expenses                 | 256,689,520.45 | 213,388,945.70  |
| Thereof: Cash payments for dividends or profit to minority shareholders by subsidiaries |                | 7,350,000.00    |
| Other cash payments relating to financing activities                                    | 8,863,306.36   | 640,538.09      |
| Sub-total of cash outflows from financing activities                                    | 309,612,826.81 | 253,238,879.24  |
| Net cash flows from financing activities  | 183,477,173.19 | -227,808,879.24 |
| 4. Effect of foreign exchange rate changes on cash and cash equivalents                 | 5,901,445.25   | -4,334,754.69   |
| 5. Net increase in cash and cash equivalents  | 366,262,667.59 | 176,865,966.98  |
| Add: Cash and cash equivalents at the beginning of period                               | 290,330,558.56 | 113,464,591.58  |
| 6. Cash and cash equivalents at the end of period                                       | 656,593,226.15 | 290,330,558.56  |

Legal representative: Deng Xijun      Director of Finance: Sun Zhiqiang      Prepared by: Wang Peihua

### (6)Cash Flow Statement of Parent Company

Unit: RMB

| Item   | 2022             | 2021             |
|--|------------------|------------------|
| 1. Cash flows from operating activities                    |                  |                  |
| Cash received from sales of goods or rendering of services | 2,148,043,331.85 | 1,843,592,265.40 |
| Refund of taxes and surcharges                             | 43,162,727.79    | 60,099,520.80    |
| Other cash receipts relating to operating activities       | 26,555,939.19    | 20,301,421.67    |
| Sub-total of cash inflows from operating activities        | 2,217,761,998.83 | 1,923,993,207.87 |
| Cash paid for goods and services                           | 1,184,007,023.31 | 912,443,357.66   |
| Cash paid to employees and paid on behalf of employees     | 209,365,212.27   | 316,455,375.21   |
| Payments of taxes and surcharges                           | 216,922,898.68   | 180,804,746.80   |
| Other cash payments relating to operating activities       | 76,617,869.20    | 92,774,844.35    |
| Sub-total of cash outflows from operating activities       | 1,686,913,003.46 | 1,502,478,324.02 |
| Net cash flows from operating activities                   | 530,848,995.37   | 421,514,883.85   |
| 2. Cash flows from investing activities                    |                  |                  |
| Cash received from withdrawing investments                 | 2,067,057,000.00 | 3,013,721,953.39 |

|   |                  |                  |
|---|------------------|------------------|
| Cash received from investment income  | 31,324,837.21    | 34,306,890.88    |
| Net cash received from disposal of fixed assets, intangible assets and other long term assets | 318,432.26       | 1,212,045.71     |
| Net cash received from disposal of subsidiaries and other operating units                     |                  |                  |
| Other cash receipts relating to investing activities  | 1,032,393.50     | 8,000,000.00     |
| Sub-total of cash inflows from investing activities   | 2,099,732,662.97 | 3,057,240,889.98 |
| Cash paid to acquire fixed assets, intangible assets and other long-term assets               | 29,466,374.75    | 21,349,226.34    |
| Cash paid to acquire investments  | 2,463,800,000.00 | 3,025,800,000.00 |
| Net cash paid to acquire subsidiaries and other operating units                               |                  | 1,200,000.00     |
| Other cash payments relating to investing activities  | 2,800,000.00     | 15,000,000.00    |
| Sub-total of cash outflows from investing activities  | 2,496,066,374.75 | 3,063,349,226.34 |
| Net cash flows from investing activities  | -396,333,711.78  | -6,108,336.36    |
| 3. Cash flows from financing activities   |                  |                  |
| Cash received from capital contributions  |                  |                  |
| Cash received from borrowings   | 5,000,000.00     |                  |
| Cash received from issuing bonds  | 450,000,000.00   |                  |
| Other cash receipts from financing activities   |                  |                  |
| Sub-total of cash inflows from financing activities   | 455,000,000.00   |                  |
| Cash repayments of borrowings   |                  |                  |
| Distribution of dividends or profits and payments for interest expenses                       | 255,637,500.00   | 204,510,000.00   |
| Other cash payments relating to financing activities  | 6,600,006.95     | 219,047.62       |
| Sub-total of cash outflows from financing activities  | 262,237,506.95   | 204,729,047.62   |
| Net cash flows from financing activities  | 192,762,493.05   | -204,729,047.62  |
| 4. Effect of foreign exchange rate changes on cash and cash equivalents                       | 11,761.60        | -4,254.66        |
| 5. Net increase in cash and cash equivalents  | 327,289,538.24   | 210,673,245.21   |
| Add: Cash and cash equivalents at the beginning of period                                     | 231,342,219.86   | 20,668,974.65    |
| 6. Cash and cash equivalents at the end of period   | 558,631,758.10   | 231,342,219.86   |

**Board of Directors of HARBIN BOSHI AUTOMATION CO., LTD.**

**April 28<sup>th</sup>, 2023**