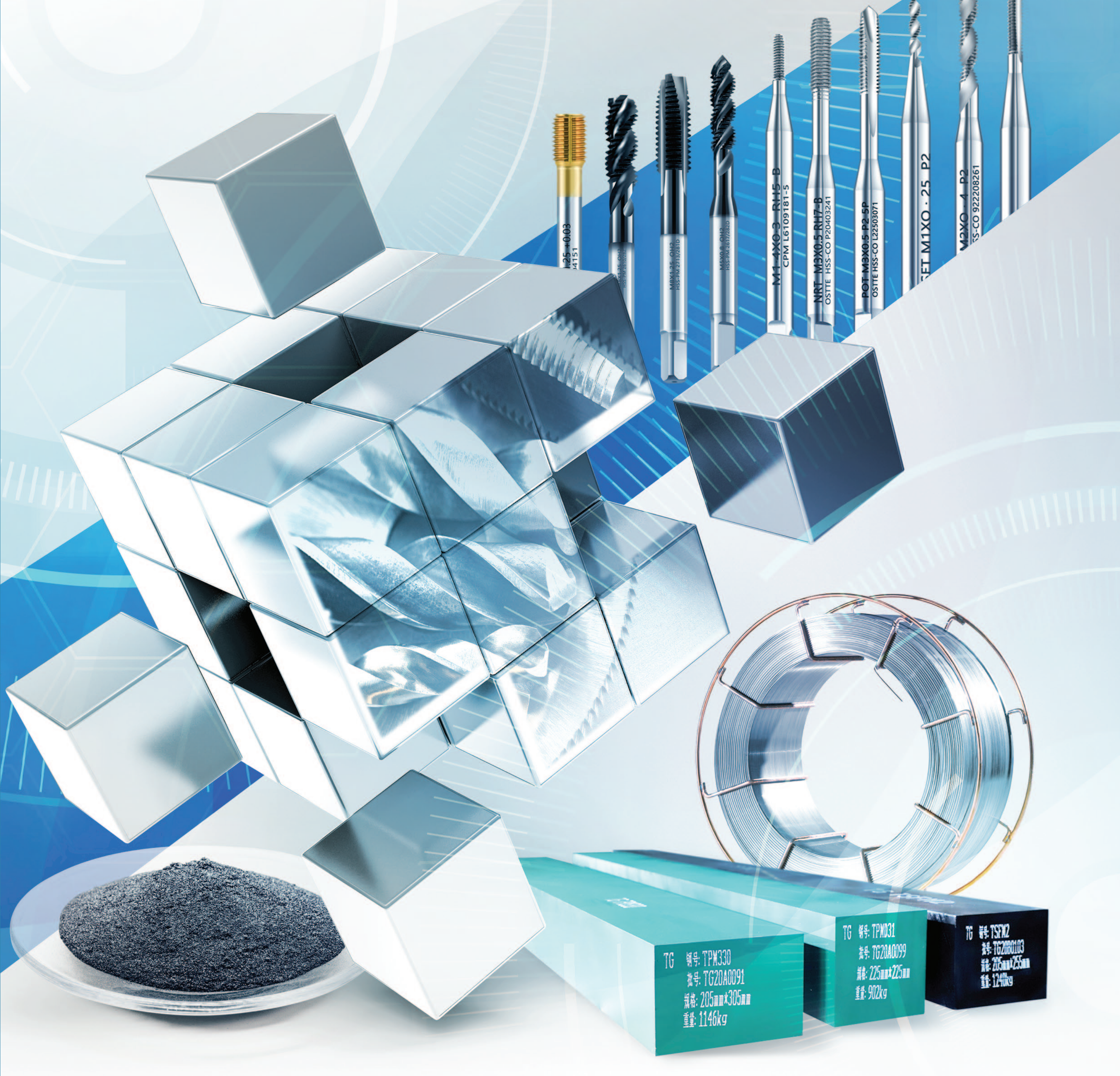
天工國際有限公司*

TIANGONG INTERNATIONAL COMPANY LIMITED

(Incorporated in the Cayman Islands with limited liability)
Stock Code : 826



2022 ANNUAL REPORT

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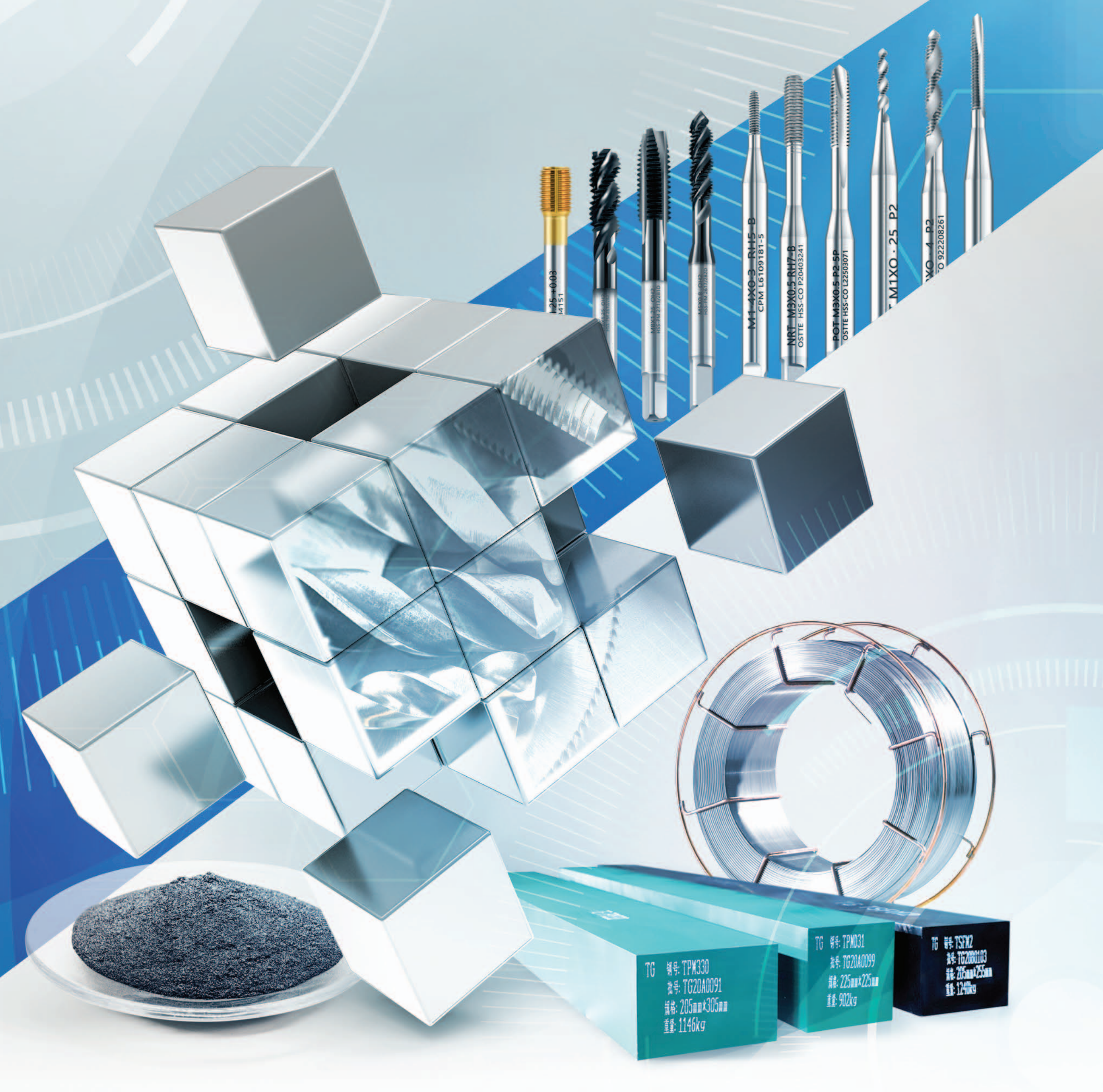
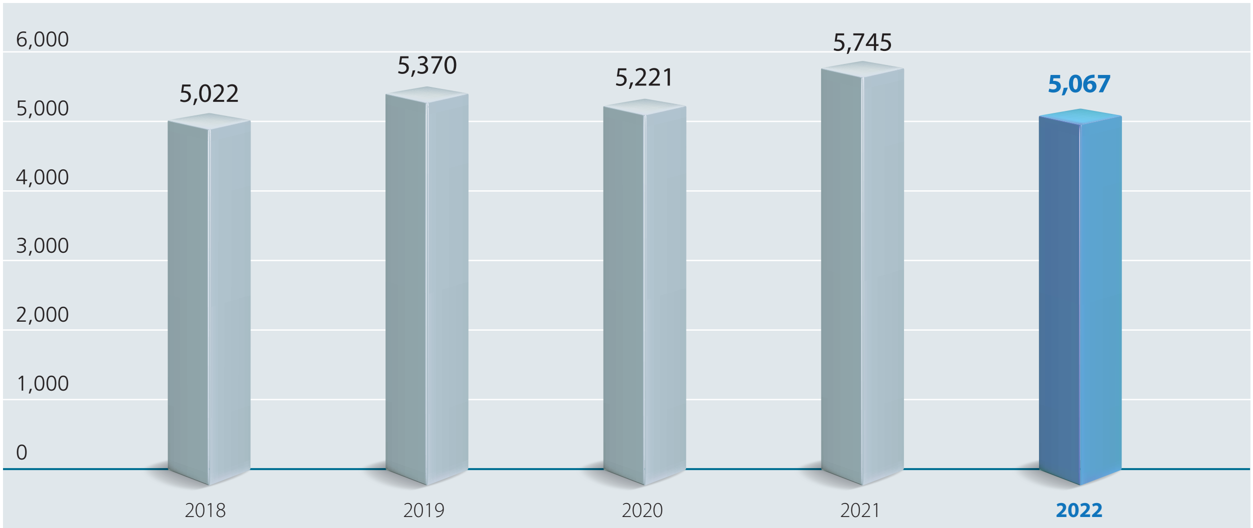


FINANCIAL HIGHLIGHTS

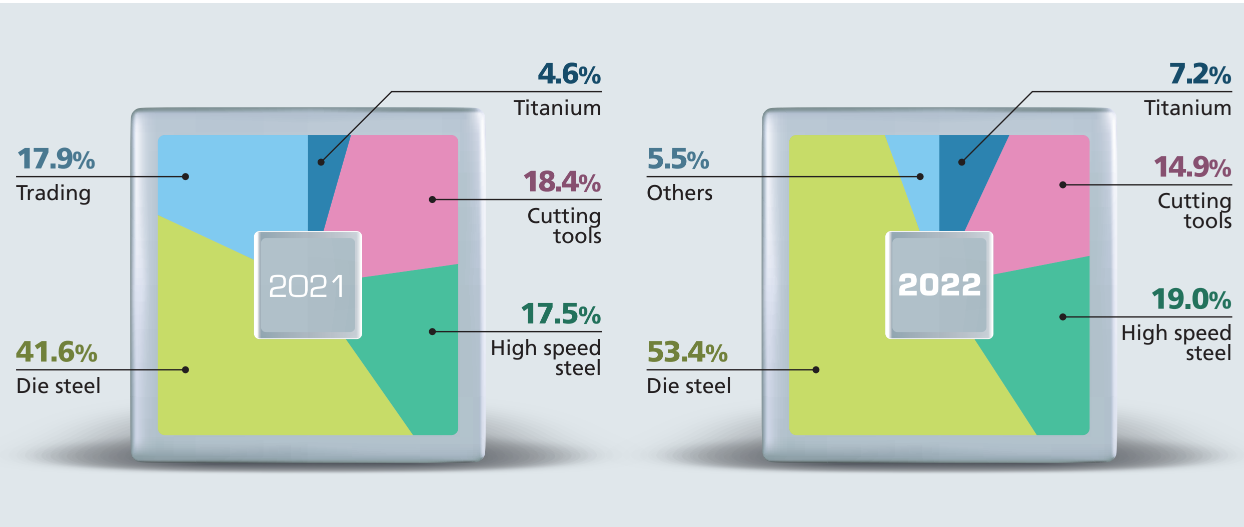
	2022	2021
Revenue (RMB'000)	**5,066,807**	5,744,873
Net profit for the year attributable to equity shareholders of the Company (RMB'000)	**503,535**	664,371
Basic earnings per share (RMB)	**0.181**	0.244
Proposed final dividend per share (RMB)	**0.0362**	0.0594

Revenue

RMB' million



Revenue by Product Mix



CHAIRMAN'S STATEMENT

2022 was a highly challenging year, yet our Group has fearlessly progressed, and successfully established a globally leading market position in new materials and high-end precision manufacturing leveraging its market leadership and diverse cost and product advantages. The Group is committed to maintaining growth and transitioning towards a high-end new materials enterprise, continuously delivering maximum returns to shareholders.

Zhu Xiaokun
Chairman

Dear Shareholders,

On behalf of the board of directors (the "Board") of Tiangong International Company Limited (the "Company", together with its subsidiaries, collectively the "Group"), I am pleased to present the audited annual results for the year ended 31 December 2022.

In 2022, there was a slowdown in China's economic growth due to a number of challenges, including rapid interest rate hikes by the US Federal Reserve that triggered significant fluctuations in the global economy and financial markets, heightened geopolitical uncertainties, and recurring outbreaks of Novel Coronavirus (COVID-19) in China, as well as continued pressure on China's real estate market. China's Gross Domestic Product (GDP) grew by only 3% in 2022, according to the National Bureau of Statistics. Despite the slowdown in economic growth, China's total economic capacity reached a new level, with GDP reaching RMB121 trillion last year, further strengthening the advantages of its massive market system. In terms of output, due to the impact of pandemic prevention and control at the beginning of the year, industrial production was lower than usual and the supply and demand of industrial production were weak, leading to a year-on-year increase of only 3.6% in the added value of industrial enterprises above designated size in 2022. In terms of exports, the growth of exports in 2022 fell by 5.5 percentage points compared to 2021, affected by the downturn in the global economy and weakened external demand. However, with the gradual easing of global supply chain issues, the demand for high-end die steel (DS) and high speed steel (HSS) in industries, especially high-end manufacturing industries, such as aviation, aerospace, energy, and automotive has steadily recovered. The continuous improvement of production technology and product quality of DS and HSS in China has increased international market confidence in Chinese products. Both are favorable to the growth of China's export of DS and HSS, thus maintaining an optimistic outlook.

During the year under review, the Group's sales declined, with revenue decreasing by 11.8% from RMB5,744,873,000 in 2021 to RMB5,066,807,000 in 2022. The resumption of operation and production in overseas markets unleashed previously suppressed demand, which strongly supported activities of the manufacturing industry and driving a robust demand for DS and HSS, resulting in rapid export growth for the Group's special steel business.

According to the latest world rankings of tool steel released by Steel & Metals Market Research GmbH (SMR), an authoritative organization in the world, the Group ranked second in the world in terms of tools steel products output. Meanwhile, the Group has achieved remarkable results with its output of HSS products ranked first in the world for 17 consecutive years and ranked first in China for 25 consecutive years.

The Group continues to focus on the downstream high-end application market for titanium alloys and is committed to strengthening its after-sales services and enhancing its refinement management. The diverse needs of downstream customers are prioritized by providing a variety of processing services and titanium alloy finished products, including titanium alloy wire for the manufacturing of high-end glasses and digital electronics. In addition, in terms of its titanium alloy business, the Group's subsidiary successfully secured orders for mobile phones and 3C (computer, communication and consumer-electronics) products during the year under review, becoming one of the assembly suppliers. This indicates that the Group's products have been recognized and accepted by major customers in the industry, laying a foundation for the development of the Group's titanium alloy business.

In terms of production capacity, after years of persistent research, careful design and frequent experiments in the field of carbides, the Group successfully produced its first carbide indexable insert during the year under review, marking a milestone in the carbide cutting tool project. Meanwhile, the Group's 7,000-ton fast forging project entered the main equipment installation phase, involving ultra-large-scale DS modules. The official launch of the project further reduces the reliance on imported DS and improves the overall level of domestic high-end DS and downstream applications.

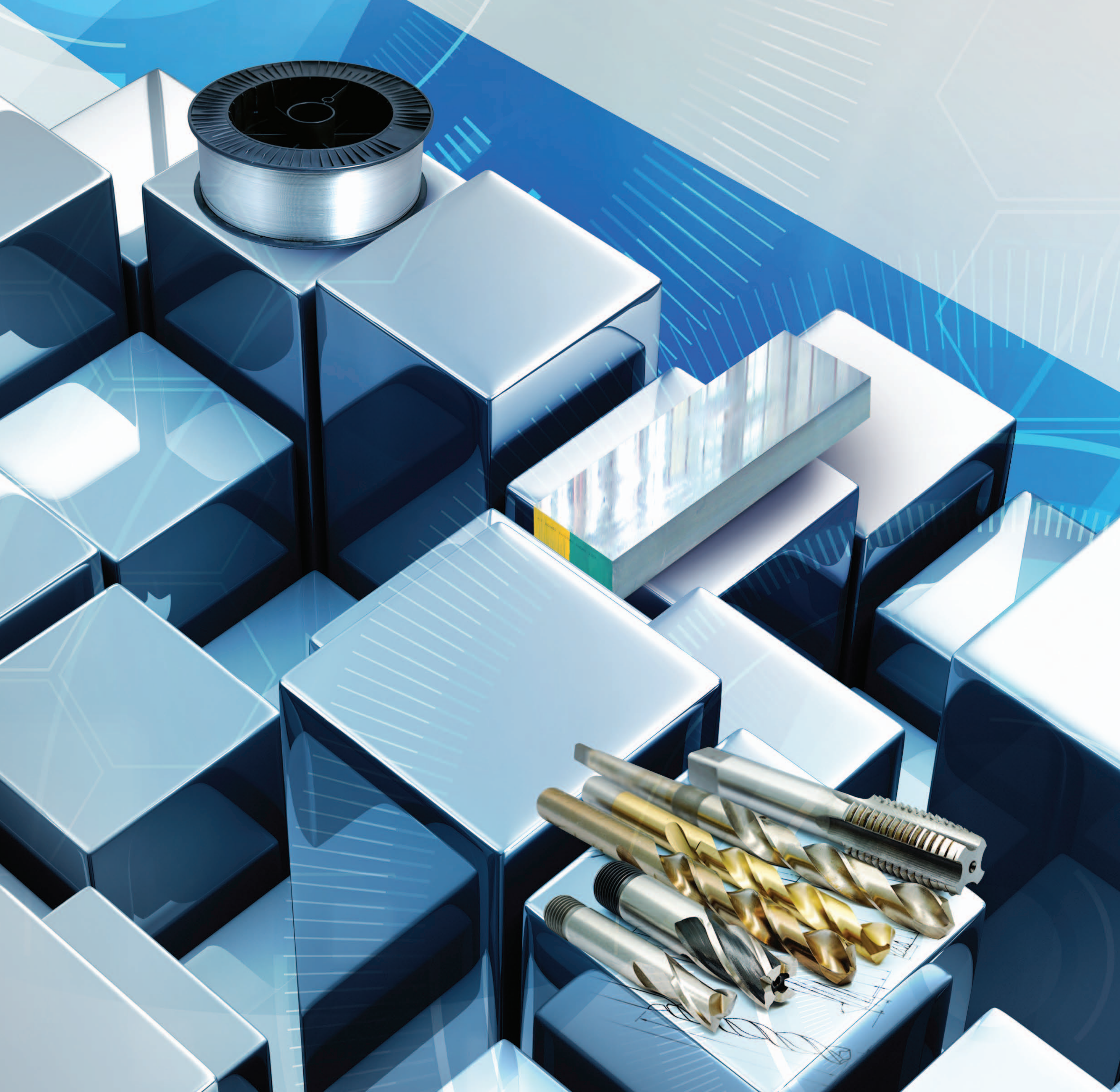
According to the "14th Five-Year Plan for the Development of Raw Material Industries" jointly issued by the Ministry of Industry and Information Technology, the Ministry of Science and Technology, and the Ministry of Natural Resources at the end of 2022, the industry is expected to continuously improve the level of supply of high-end, rationalized structure, and security, while promoting low-carbon green development and faster digital transformation driven by policies. Looking ahead, as China is expected to become the world's leading research and development, production and application hub for important raw material products by 2035, the Group will continue to lead industry development by leveraging its industry-leading and specialized equipment, technology, and management advantages. While reducing costs and increasing efficiency, the Group will optimize production processes and enhance research and development capabilities to solve industry bottlenecks, contributing to the nation's high level of technological self-reliance and self-improvement in industrial development.

Appreciation

I would like to take this opportunity to thank my fellow directors for their support and contributions in 2022. Moreover, the Group's successful completion of various business and technological innovations in 2022 would not have been possible without the unwavering dedication, commitment, and perseverance of all Tiangong employees during this challenging year. On behalf of the Board, I express my heartfelt gratitude to all our employees. We would also like to sincerely thank our Shareholders, customers, suppliers, and business partners for their long-term support and trust. The Group is committed to maintaining growth, transforming into a high-end new materials enterprise, and striving for innovation to bring sustainable long-term value and attractive returns to Shareholders.

Zhu Xiaokun
Chairman

MANAGEMENT
DISCUSSION & ANALYSIS



Business Review

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
DS	**2,703,341**	**53.4**	2,391,914	41.6	311,427	13.0
HSS	**964,780**	**19.0**	1,005,436	17.5	(40,656)	(4.0)
Cutting tools	**756,726**	**14.9**	1,057,984	18.4	(301,258)	(28.5)
Titanium alloy	**362,420**	**7.2**	263,146	4.6	99,274	37.7
Trading of goods	**–**	**–**	1,026,393	17.9	(1,026,393)	(100.0)
Others	**279,540**	**5.5**	–	–	279,540	–
	5,066,807	**100.0**	5,744,873	100.0	(678,066)	(11.8)

DS — accounted for 53.4% of the Group's revenue in FY 2022

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
DS						
Domestic	**917,466**	**33.9**	1,216,376	50.9	(298,910)	(24.6)
Export	**1,785,875**	**66.1**	1,175,538	49.1	610,337	51.9
	2,703,341	**100.0**	2,391,914	100.0	311,427	13.0

DS is a type of high alloy special steel manufactured using rare metals including molybdenum, chromium and vanadium. DS is mainly used in die and mould casting as well as machining processing. Many different manufacturing industries require moulds, including automotive, high-speed railway construction, aviation and plastic product manufacturing industries.

In 2022, due to the COVID-19 outbreak, the normal business operations and logistics were affected, resulting in a decline in demand for steel in the downstream manufacturing industry. The decline in demand for steel led to a continued trend of reduction in steel production. Domestic supply and demand in steel industry were both weak and the sales volume of domestic DS decreased by 26%. Increase in cost of rare metals, which was used as raw materials for DS production, was passed to the downstream customers as usual. The price adjustment is limited by the weak domestic demand, allowing for the pass-through of part of the increased cost only. This narrowed the increase in average selling price to just 2% compared to 2021. Domestic revenue recorded a decrease of 24.6% to RMB917,466,000 (2021: RMB1,216,376,000).

In order to curb the high inflation, the Federal Reserve Board of the United States significantly increased the federal funds rate from 0.25% to 4.50% in 2022, resulting in a significant depreciation of RMB against the US dollar. As a result, Chinese's exports benefited from this over the course of the year. Further, the Russia-Ukraine war led to the continuous surge in energy prices such as oil and natural gas. Ukraine's steel production industry was badly hit and a number of steel plants were shut down due to the war. Russian steel exports were also sanctioned by the European Union. In addition, Europe has implemented the "green steel policy" to reduce carbon emissions in recent years, which led to an imbalance between supply and demand of European steel products. In contrast, China, as the leading country in steel export and processing, had a relatively stable steel supply. China's steel supply simply filled the gap in the international market. The above-mentioned reasons led to an increase in sales volume and average selling price by 26% and 20%, respectively, compared with 2021. As a result, the Group's export revenue increased significantly by 51.9% to RMB1,785,875,000 (2021: RMB1,175,538,000).

Overall, sales of the DS segment increased by 13.0% to RMB2,703,341,000 (2021: RMB2,391,914,000).

HSS — accounted for 19.0% of the Group's revenue in FY 2022

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
HSS						
Domestic	**404,672**	**41.9**	570,361	56.7	(165,689)	(29.0)
Export	**560,108**	**58.1**	435,075	43.3	125,033	28.7
	964,780	**100.0**	1,005,436	100.0	(40,656)	(4.0)

HSS, manufactured using rare metals including tungsten, molybdenum, chromium, vanadium and cobalt, is characterised by greater hardness, heat resistance and durability. These attributes make HSS suitable to such applications as cutting tools and in the manufacture of high-temperature bearings, high-temperature springs, internal-combustion engines and rolls, with wide usage in specific industrial applications such as automotive, machinery manufacturing, aviation, and electronics industries.

Similar to DS, the domestic market experienced a decline in demand as a result of the COVID-19 outbreak. The sales volume of domestic HSS decreased by 37%. HSS experienced similar situation on cost transmission as DS. However, due to the increase in proportion of powder metallurgy products, which is of a higher average selling price, the overall average selling price of domestic HSS products increased by 12%. Domestic revenue decreased by 29.0% to RMB404,672,000 (2021: RMB570,361,000).

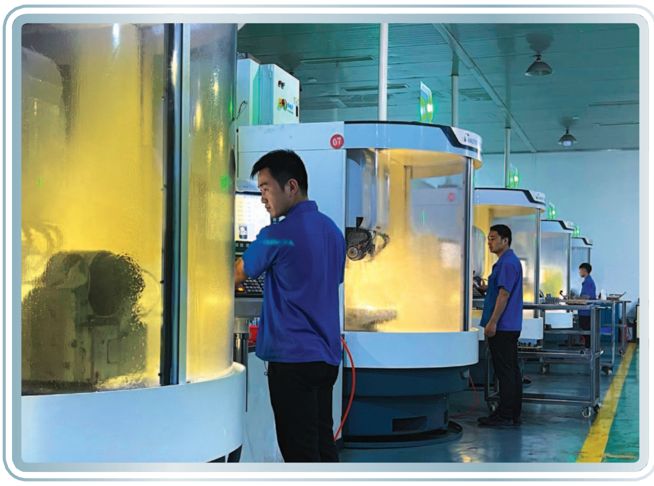
For export businesses, the demand of HSS was limited by the declined demand of its downstream cutting tools industry. There was a slight decrease in sales volume of 3% compared to 2021. However, for the average selling price, there was a remarkable increase of 33% compared to 2021. This was also due to the increase in proportion of exported powder metallurgy products. As a result, HSS export revenue increased substantially by 28.7% to RMB560,108,000 (2021: RMB435,075,000).

Overall revenue of HSS in 2022 remained relatively stable at RMB964,780,000 (2021: RMB1,005,436,000).

Cutting tools — accounted for 14.9% of the Group's revenue in FY 2022

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
Cutting tools						
Domestic	**272,521**	**36.0**	285,420	27.0	(12,899)	(4.5)
Export	**484,205**	**64.0**	772,564	73.0	(288,359)	(37.3)
	756,726	**100.0**	1,057,984	100.0	(301,258)	(28.5)

Cutting tools segment includes HSS and carbide cutting tools. HSS cutting tools products can be categorised into four major types — twist drill bits, screw taps, end mills and turning tools. All of these are used in industrial manufacturing. The two main types of HSS cutting tools manufactured by the Group are twist drill bits and screw taps. The Group's vertical integration extending from upstream HSS production to downstream HSS cutting tools production brought us a significant cost advantage over our peers. High-end carbide tools manufactured by the Group mainly comprised of customised carbide tools.



Domestic downstream manufacturing industries were affected by the COVID-19 outbreak. Domestic demands for cutting tools in 2022 was concentrated in the computer numerical control ("CNC") machine tools application, which was relatively specialized and high-end in nature. This resulted an overall 17% decrease in sales volume and 15% increase in average selling price. Domestic revenue slightly decreased by 4.5% to RMB272,521,000 (2021: RMB285,420,000).

The export sales volume of cutting tools fell by 44% compared to 2021. It was mainly because the demand for household DIY cutting tools fell from the peak in 2021 after the removal of quarantine policy by foreign countries. At the same time, overseas distributors accumulated a large amount of inventory to cope with the demand increased during COVID-19 in 2021, resulting in a reduction in purchases in 2022. The average selling price increased by 11% compared to 2021, which was mainly due to the transmission effect of the increased upstream HSS price. In total, export revenue of cutting tools decreased by 37.3% to RMB484,205,000 (2021: RMB772,564,000).

Overall revenue of cutting tools segment decreased by 28.5% to RMB756,726,000 (2021: RMB1,057,984,000).

Titanium alloy — accounted for 7.2% of the Group's revenue in FY 2022

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
Titanium alloy						
Domestic	**356,983**	**98.5**	260,095	98.8	96,888	37.3
Export	**5,437**	**1.5**	3,051	1.2	2,386	78.2
	362,420	**100.0**	263,146	100.0	99,274	37.7

The corrosion resistance nature of titanium alloy promoted the extensive applications of titanium alloy in various industries, including aerospace, chemical pipeline equipment, nuclear and ocean industries.

The Group's titanium alloy products have obtained quality certification from international authoritative organizations such as Bureau Veritas and set a record for the largest specification of cold-drawn titanium alloy coil in the domestic industry. This helped the Group maintain its industry-leading position in terms of the quality of its titanium alloy coil.

With the successful strategic adjustment to focus on the consumer market, the Group introduced a new domestic manufacturer which specialised on making frame for branded consumer-electronic manufacturer using the titanium alloy coil produced by the Group. Sales to this new customer contributed around RMB107 million of revenue in 2022, which represented the major increment in the domestic revenue. We will continue to receive new orders from this customer in 2023. With the addition of this new product, the average selling price increased by 36%. The Group is considering to increase the capacity of titanium alloy production to fulfil the new coming orders.

Combining the minimal fluctuation of the export revenue, the overall revenue increased by 37.7% to RMB362,420,000 (2021: RMB263,146,000).

Trading of goods

This segment involved the trading of general carbon steel products outside of the Group's production scope. As the Group continued to focus on its principal and core businesses, the Group has ceased its operation in this segment since 1 January 2022.

Others — accounted for 5.5% of the Group's revenue in FY 2022

In the others segment, the Group mainly procures raw materials like hardware, plastic and electronic components from suppliers, which will then be commissioned to packagers for assembly and packed into power tool kits for sale to overseas customers. The power tools currently sold include electric drill sets, electric batch sets, electric toothbrush sets, hardware sets, small fans and safety lights, etc. The entire segment is an export operation.

	For the year ended 31 December					
	2022		2021		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
Export	**279,540**	**100.0**	–	–	279,540	–

The others segment is a new assembly and sales business derived from the power tools products of the existing cutting tools customers. Through this, the Group has achieved downstream extension enabling us to provide more diversified products and services. Currently, the entire others segment falls into export business with a total revenue of RMB279,540,000 for 2022 (2021: Nil).

Financial Review

Net profit attributable to equity shareholders of the Company decreased by 24.2% from RMB664,371,000 in 2021 to RMB503,535,000 in 2022.

Revenue

Revenue of the Group for 2022 totalled RMB5,066,807,000, representing a decrease of 11.8% when compared with 5,744,873,000 in 2021. Due to the COVID-19 outbreak in China, the domestic demand shrinked in general. On the other hand, overseas demand for DS and HSS (collectively known as tools steel) has shown decent recovery with the resumption of economic activities in foreign counties. Rebound of overseas demand in tools steel products and the strategic adjustment to focus on the titanium alloy consumer market were the main driving force for the Group's revenue in 2022. For an analysis of individual segments, please refer to the "Business Review" section.

Cost of sales

The Group's cost of sales was RMB3,918,320,000 in 2022, representing a decrease of 9.7% as compared with RMB4,339,675,000 in 2021, as a result of the decrease in revenue.

Gross margin

In 2022, the overall gross margin was 22.7% (2021: 24.5%). Set out below are the gross margin of the five segments of the Group in 2022 and 2021:

	2022	2021
DS	**19.1%**	26.6%
HSS	**20.8%**	32.5%
Cutting tools	**27.5%**	28.4%
Titanium alloy	**28.5%**	16.0%
Trading of goods	**nil**	0.03%
Others	**22.7%**	nil

DS

Demand was sluggish and the cost transmission of price increment in raw materials (i.e rare metals) was not as smooth as that of 2021. In addition, cost of energy (including electricity and natural gas) was also on the rise. As a result, the gross margin of DS decreased from 26.6% in 2021 to 19.1% in 2022.

HSS

Similar situation as DS was noted in HSS segment. HSS resulted a higher average gross margin than DS due to the contribution of high margin powder metallurgy products. The overall gross margin of HSS decreased from 32.5% in 2021 to 20.8% in 2022.

Cutting tools

Gross margin of cutting tools decreased from 28.4% in 2021 to 27.5% in 2022. It was mainly because the output of cutting tools decreased by about 20% compared to 2021. The decrease in scale effect led to an increase in average unit cost. On the other hand, the addition of high-margin powder metallurgy tap products partially offset the negative impact of scale effect.

Titanium alloy

Gross margin of titanium alloy increased from 16.0% in 2021 to 28.5% in 2022. Products in this segment were mainly divided into pure titanium and alloy products. In response to the needs of the titanium alloy in consumer market, the Group provided deep-processed products with higher added value. The sales of titanium alloy products accounted for 7.2% of the total segment revenue in 2022 (2021: 4.6%). Since the production process of titanium alloy products required a high melting point and the materials were easy to polarize, it brought great technical difficulties to the control of product composition uniformity and stability. Therefore, the titanium alloy products offered a higher average selling price and gross profit margin than the pure titanium products.

Others

Others segment was a new business for the Group related to the assembly and sales of power tools kits to overseas customers. The Group aimed to expand and diversify our products with this new line of business.

Other income

Other income increased from RMB129,387,000 in 2021 to RMB157,895,000 in 2022. In 2022, USD appreciated significantly against RMB. The Group's net monetary assets denominated in USD, which mainly arise from the export business, resulted in exchange gain in 2022. The increasing effect of exchange gain was partially offset by the decrease in local government grants received.

Distribution costs

Distribution costs in 2022 was RMB219,776,000 (2021: RMB217,737,000). As indicated by the Group's export revenue, 61.5% of the Group's revenue were export sales (2021: 41.5%), the Group incurred more expenses in the distribution of its products. On the other hand, the average shipping cost decreased with various preferential pricing policies as compared to 2021. Accordingly, freight and related logistic expenses increased 6%. In 2022, distribution costs amounted to approximately 4.3% of revenue (2021: 3.8%).

Administrative expenses

Administrative expenses increased from RMB134,575,000 in 2021 to RMB146,666,000 in 2022. The increase was mainly due to the increase in headcount and average salaries of administrative staffs. In 2022, administrative expenses amounted to approximately 2.9% of revenue (2021: 2.3%).

Other operating expenses

Other operating expenses decreased from RMB47,274,000 in 2021 to RMB31,947,000 in 2022.

In 2021, RMB appreciated against USD, EUR and HKD. Offsetting the assets and liabilities denominated in foreign currencies, the Group had a net assets position in USD, EUR and HKD. As a result, the Group recognised a net foreign exchange losses of RMB36,075,000 in 2021. In 2022, an exchange gain was recognized in other income as USD appreciated significantly against RMB.

Additional impairment provision of RMB24,645,000 was provided according to the credit loss estimation policy of the Group.

Net finance costs

In 2022, higher interest rate and average balance of bank deposit offered a higher finance income as compared to 2021.

For the finance expenses, in the high interest rate environment, the interest on bank loans increased. There was interest expenses of RMB7,264,000 being capitalized into property, plant and equipment in 2021 while nil was capitalized in 2022.

Taking effect of all the above, the Group's net finance costs was RMB129,895,000 in 2022, which was comparable to RMB131,484,000 in 2021. Please refer to Note 8(a) to the consolidated statement of profit or loss for a detailed breakdown of net finance costs.

Income tax

As set out in Note 9 to the consolidated statement of profit or loss, the Group's income tax expense decreased by 106% from RMB80,025,000 in 2021 to credited RMB4,750,000 in 2022. It was mainly due to (i) PRC tax policy to increase support for scientific and technological innovation tax deduction. It allowed enterprises to have full amount tax deduction immediately on fixed assets expenditure incurred during 2022Q4. In addition, an additional 100% super deduction was introduced on the same expenditure, and (ii) there was a reversal of excessive withholding tax on dividend incurred in previous year.

Profit for the year attributable to equity shareholders of the Company

As a result of the factors set out above, the Group's share of profit decreased by 24.2% from RMB664,371,000 in 2021 to 503,535,000 in 2022. The margin of profit attributable to equity shareholders of the Company decreased from 11.6% in 2021 to 9.9% in 2022.

Total comprehensive income for the year attributable to equity shareholders of the Company

In 2022, total comprehensive income for the year attributable to equity shareholders of the Company was RMB422,697,000 (2021: RMB676,701,000) after taking into account foreign currency translation differences and fair value adjustments on equity investments.

During the year, the Group credited to other comprehensive income a foreign currency translation difference of RMB57,915,000 (2021: credited RMB12,086,000) related to translation of financial statements of Hong Kong subsidiaries and overseas equity accounted investees.

The Group also recognised a fair value loss in the consolidated statement of profit or loss and other comprehensive income of RMB22,806,000 (2021: gain of RMB24,430,000) on its equity investments.

Other financial assets

Other financial assets held by the Group included equity interests in Bank of Jiangsu Co., Ltd., 廈門創豐翌致投資管理合夥企業(有限合夥) (Xiamen Chuangfeng Yizhi Investment Management Partnership (Limited Partnership)*), Nanjing Xiaomuma Technology Co., Ltd., JM Digital Steel Inc., 寧波梅山保税港區啟安股權投資合夥企業(有限合夥) (Ningbo Meishan Free Trade Port Qian Equity Investment Partnership (Limited Partnership)*), 中金佳泰叁期(深圳)私募股權投資基金合夥企業(有限合夥) (CICC Jiatai Private Equity Fund III (Shenzhen) Partnership (Limited Partnership)*), Ji'nan Financial Fosun Weishi Equity Investment Fund Partnership (Limited Partnership) and 丹陽博雲恒大天工產業投資中心(有限合夥)(Danyang Boyun Hengda Tiangong Industrial Investment Center (Limited Partnership)*). All of these investments were stated at their fair value as at 31 December 2022. Other than the fair value loss, net of tax, of RMB22,806,000 (2021: gain of RMB24,430,000) recorded in the other comprehensive income in 2022, the fair value gain of RMB4,910,000 was recorded in other income (2021: gain of RMB11,502,000) for financial assets measured at fair value through profit or loss during the year.

Trade and bills receivable

Trade and bills receivable increased from RMB1,883,334,000 in 2021 to RMB2,285,661,000 in 2022. This was mainly because export revenue represented a significant portion in current year. Credit periods given to overseas customers was slightly longer and the average shipping time this year was also delayed due to unable shipping capacity, resulting in an increase in trade and bills receivable balance.

Industry Review

During the year under review, China's annual economic growth was still hindered by the turbulence in global financial markets and energy and price crises despite the recovery of the domestic economy due to the effective implementation of a package of policies to stabilize the economy by governments at all levels, as evidenced by a steady growth in China's GDP for the first and second quarters. According to the National Bureau of Statistics, China's GDP annual growth rate was 3% in 2022, slightly lower than the central government's forecast. In terms of domestic industrial production, the industrial economy was generally stable, thanks to a series of relief policies and measures introduced by the government.

In terms of overseas markets, the multiple downward pressures on the global macro-economy caused a slowdown in the economic growth and the lingering pandemic took its toll on the society and economy in 2022. The rapid interest rate hikes by the Federal Reserve has triggered significant volatility in the global economy and financial markets. In contrast, China has made steady growth a core target of its monetary policies and adopted relatively accommodative monetary policies such as interest rate cuts and reserve ratio cuts. The differences in monetary policies between US and China have created volatility in China's financial markets, bringing uncertainties to exchange rates, cross-border capital flows and other aspects. Furthermore, geopolitical risks have intensified. The Russia-Ukraine conflict has intensified the pressure on energy and grain supply and pushed up inflation. Lastly, the US continued to exert pressure on China's high-tech sector by means of export control, signifying the wrestling between the two countries have become a new normal.

In general, the overall steel industry experienced decreasing demand and lower profits in 2022 as affected by multiple factors. The resurgence of the pandemic also led to a sharp decline in the industrial economy's demand for steel. As indicated by the statistics of the China Iron and Steel Association, the operating income of key iron and steel enterprises was approximately RMB6.59 trillion during the year under review, representing a year-on-year decrease of 6.35%; and the total profit was RMB98.2 billion, representing a year-on-year decrease of 72.27%.

Market Review

Due to imbalance of supply and demand, the DS market experienced a muted peak season in 2022. However, the high-end manufacturing industry as represented by high-speed railways and the automobile industry experienced rapid and sustainable development, which is expected to boost the demand for medium and high-end DS products. For industries having higher quality requirements in steel, the scope of application of DS with high alloy content will continue to expand, thereby leading to a rapid increase in demand. In 2022, the automobile industry suffered greatly as a result of the pandemic. Although the government introduced corresponding support policy, the recovery in sales, especially fossil fuel vehicles, was still slow. Meanwhile, with the rapid emergence of smart electric vehicles, the automobile industry is expected to become one of the high-quality growth tracks in the long term after smartphones. It is expected to drive demand for large-scale DS with high alloy content with its integrated manufacturing flow.

Cutting tools are the main application market for HSS and some alloy steel. During the year under review, the CNC machine tool market was continuously stimulated by domestic demand, so it can be predicted that the demand for cutting tools will increase significantly in the future. Although the export environment was not very optimistic this year, mainly relying on national policies to support domestic sales to balance import and export volumes, export remains the pillar market for cutting tools in the long run. As the high-end manufacturing industry is expected to maintain robust demand, coupled with subsiding pandemic, the machine tool industry is expected to embrace a strong recovery, boosting sales amount of the industry.

In terms of policy, the year 2022 marked the second year of the "14th Five-Year Plan", during which China's steel industry continued to face issues such as great pressure of excess capacity, insufficient industrial safety and security capabilities, a need to enhance the green and low-carbon development level, and low industrial concentration ratio. Therefore, the government has introduced various policies to support the orderly and high-end development of the steel industry. Among which, the "Guiding Opinions on Promoting High-Quality Development of the Steel Industry" jointly issued by the Ministry of Industry and Information Technology, the National Development and Reform Commission and the Ministry of Ecology and Environment on 7 February, proposing that by 2025, the steel industry will basically form a high-quality development layout, encouraging steel enterprises to continuously improve their independent innovation, optimize industrial structure and develop green and low-carbon best practices. It aims to improve the quality of supply while protecting resources, which in turn will consolidate the development of China's steel industry and international convergence and the pursuit of high-quality global competitiveness.

Accomplishments

The Company and the specialised die material committee under China Die & Mould Industry Association, successfully co-organised the technology and industry forum on "Integrated Large-scale Die Materials and Manufacturing and Application" in Danyang. At the forum, the Company entered into Strategic Cooperation Agreements with 13 enterprises, symbolising the Company's strong foray into the field of integrated large-scale die-casting.

On the sixth China Brand Day, China Metallurgical News released the 2022 Steel Brand List in China, in recognition of a number of brands with international influence in the process of transforming from "Chinese steel products" to "Chinese steel brands". Tiangong International was awarded the "2022 Global Influential Brand in the Steel Industry".

Precision Tools, a wholly-owned subsidiary of the Company, acquired the entire equity interest of 江蘇天冠精密機械發展有限公司 (Jiangsu Tianguan Precision Machinery Development Co., Ltd.*) ("Tianguan Precision"), meaning that the Group has made another step forward in high-end precision cutting tools. Tianguan Precision is equipped with a production line with an annual output of approximately 5 million pieces of powder metallurgy taps. The acquisition of Tianguan Precision will help the Group achieve import substitution, promote the localisation of high-end cutting tools, and expand its presence in the international industrial market, automotive industry and aerospace precision industry while capturing domestic market share.

The "Research and Development of Key Technologies for Preparation of Powder Metallurgy Ultra-high Alloy High-speed Steel Micro-wire for Aviation Micro-drilling (航空微鑽用粉末冶金超高合金高速鋼微細絲製備關鍵技術研發)" as declared by Weijian Tools, a wholly-owned subsidiary of the Company was shortlisted in proposed project list under the special fund of the Science and Technology Plan of Jiangsu Province (key research and development plan, industry prospect and key core technologies).

TG Tools's plan for proposed Spin-off and Listing in the A-share market is under progress and is expected to be a significant milestone for the Group in the capital market. TG Tools, together with its subsidiaries, are engaged in the manufacture and sale of alloy tools steel, whose production processes include conventional metallurgy and powder metallurgy.

TG Tech has submitted the listing counseling materials relating to proposed listing on the Beijing Stock Exchange to the Jiangsu Securities Regulatory Bureau, and has entered the counseling stage.

The Group successfully completed and launched of its first large-scale tool steel powder metallurgy production line in the PRC in November 2019 and the second phase of the powder metallurgy project was put into operation with an expanded annual production capacity of 5,000 tons. For further details, please refer to the section headed "Future Outlook — Product Development Strategy — Powder Metallurgy Industry" of this report.

In the first half of 2022, the Group formally launched the 7,000 tons fast forging project, to meet the growing market demand. Meanwhile, the Group strengthened the upgrading of its internal product structure system, such as extensive demand for large-scale DS in the field of integrated moulding and casting.

Following its recognition as "'Small Giant' Enterprises with Specialized, Sophisticated Techniques and Unique, Novel Products of Zhenjiang in 2022 (二零二二年度鎮江市專精特新「小巨人」)", TG Tech, a subsidiary of the Company was successfully selected as "Small- and Medium-sized Enterprises with Specialized, Sophisticated Techniques and Unique, Novel Products of Jiangsu Province in 2022 (二零二二年度江蘇省專精特新中小企業)". This marked that TG Tech has made significant achievements in terms of independent innovation, enhancement of core competitiveness and continuous improvement in the quality and level of development.

Future Outlook

Operation Strategy

The Group has been leading the industry with its professional equipment, technology and management advantages. Over the year, the Group has been focusing on research and development and cost control, and is committed to transforming its long-standing achievements and experience into innovative applications in the steel metallurgy industry, thereby empowering the development and upgrade of the industry while also striving to meet the domestic market demand and gain international market share. Precise strategic layout, efficient execution ability and world-leading technology are the three cores of the Group.

Domestic industry development

During the year under review, the domestic industrial production market was affected by a new round of pandemic outbreak and international geopolitical turmoil. As a result, the demand for steel in the domestic market was relatively sluggish and the Group's revenue from DS and HSS business in the PRC also declined to varying degrees, adversely affecting the overall business performance of the Group. However, with the introduction of a variety of economic policies by the government in the third quarter and the continued implementation of these policies, China's economic activities have resumed successively and industrial production has also shown a positive recovery trend.

In order to thoroughly implement the decisions and arrangements of the CPC Central Committee and the State Council, China's taxation authorities actively promoted the implementation of the Development Plan for the New Energy Vehicle Industry (2021-2035) (《新能源汽車產業發展規劃(2021-2035年)》) in 2022, to inject new momentum into the new energy vehicle industry. As one of the Group's key downstream industries, the new energy vehicle market will benefit from these favourable policies and the epidemic relief in China, which will in turn boost demand from upstream industries.

Meanwhile, China has clarified the "30•60 Goals" early on. In response to national steel industry goals and the overall national strategy of carbon peaking and carbon neutrality, the Group continues to promote the innovation transformation of products. In order to keep pace with the market development speed, the "50,000 Tons Alloy Tool Steel Capacity Expansion Project" planned by the Group was carried out in an orderly manner, which is expected to unleash a production capacity of 300,000 tons of alloy tool steel. On the basis of expanding capacities, the Group will continue to strengthen its research and development of high-end alloy tool steel (including HSS and DS), so as to enhance the competitiveness of the Group's products.

As a pioneer in the industry, the Group will continue to overcome technical barriers in the field of alloy tool steel. As the cornerstone of the manufacturing industry, the Group will help the Chinese steel market break away from the passive situation of relying on imports from overseas steel market. Taking tackling the "bottleneck" technology at the material end as its core task, the Group will make active efforts to ensure the national security need of key special steel material through leading R&D technologies and strive to enhance its core competitiveness.

Export operation

During the year under review, the global economy was confronted with multiple challenges during its recovery process, and even fell into a slump at one point. To alleviate the sustained rising inflation levels in the United States, the Federal Reserve initiated a round of interest rate hike. A slowdown in economic growth led to significant fluctuations in the currencies of emerging economies, which in turn affected international steel trade. The RMB was also somewhat impacted. As affected by uncertain factors such as mounting downward pressure on the global economy and rising geopolitical risks, the Group will keep a close eye on the drastic changes in the demand from overseas market and adjust its export operation strategies in a timely manner.

After fully digesting excess inventory in 2022, the overseas market for cutting tools witnesses its demand returning to normal levels and is expected to provide strong export orders in 2023.

Overseas expansion

Under the guidance of its globalisation strategy, the Group has formed a rather diversified overseas sales network. As the pandemic subsides, the Group's overseas production bases have resumed full operation and is in continuous expansion. During 2022, the second phase of the plants in Rojana Rayong Pluak Daeng Industrial Park, Rayong, Thailand was officially launched and is expected to be completed in the second half of 2023. At that time, the project's production capacity will be increased by 50 million pieces, bringing the total production capacity of the two-phase project to nearly 100 million pieces, doubling the cutting tool production capacity. The Group will continue to optimize and consolidate its current overseas layout to respond to the recovery of overseas demand and global uncertainties.

Product Development Strategy

Powder Metallurgy Industry

In recent years, thanks to the rapid development of the automobile, machinery manufacturing, metal industry, aerospace, instrumentation, hardware tools, engineering machinery, electronic household appliances and high-tech industries, the capacity of powder metallurgy has been expanding. With the continuous improvement, innovative development, and application of existing products and production processes in the powder metallurgy market, it is expected that the Chinese powder metallurgy industry will continue to grow.

With the official completion and launch of its first large-scale tool steel powder metallurgy production line in the PRC in November 2019, the Group successfully entered the powder metallurgy industry. As the only enterprise in the domestic cutting tool market with a complete industry chain from producing high-end powder materials to powder tools, the Group has broken foreign technical monopoly and opened the high-end market. Currently, powder metallurgy products mainly include HSS as it has a higher unit price. During the year under review, the performance of the Group's powder metallurgy business met expectations. With the second phase of the powder metallurgy project being put into operation, the expanded annual production capacity was 5,000 tons. It is expected that the production capacity and sales of powder metallurgy will significantly increase in line with further recovery in the HSS market.

In addition, the Group will continue to deepen the transformation of high-end products and make unremitting efforts in the research and development of new production methods for powder metallurgy. During the year under review, the Group overcame various technical difficulties and broke a number of bottlenecks. The Group also spared no effort in expanding distribution in overseas markets and actively promoted the overseas expansion of its powder metallurgy business. Meanwhile, the Group is vigorously promoting the application of powder metallurgy HSS cutting tools, including powder metallurgy taps. It is expected to complete the annual production of 10 million powder metallurgy taps by end of 2023 to achieve import substitution and greatly improve the machine tool processing capacity of China's manufacturing industry.

Carbide Cutting Tools Industry

Cutting tools are the foundation of the machinery manufacturing industry and major technical fields. The quality of cutting tools directly determines the production level of the machinery manufacturing industry and is one of the most important factors for the manufacturing industry to improve production efficiency and product quality. In addition to HSS cutting tools, the Group has actively sought product upgrading and diversification and focused on the high-end carbide cutting tools market in recent years, providing cutting tools with higher alloy content and higher added value to seize the opportunities brought by the continuous growth of demand for high-end carbide cutting tools in China.

During the year under review, the Group made phased progress in carbide. Firstly, the Group has established close cooperation with an experienced expert team specializing in carbide and successfully set up an affiliated company with it. The expert team will be able to provide technical support to assist the Group in building production capacity of carbide cutting tools, and is expected to officially commence production by the end of 2023, with production capacity designed for blades, cutting tools, and rods. Secondly, with the arrival of the first batch of equipment for carbide cutting tools, the Group successfully produced its first indexable carbide blade, marking a breakthrough in the Group's carbide project. The Group's carbide cutting tools will be widely used in CNC machine tools.

Titanium Alloy Industry

Titanium alloy coils made from titanium are used in a wide range of applications, and its customizable characteristic enables it to be used in downstream scenarios such as eyeglass frames, 3D printing and 3C (computer, communication and consumer-electronics) products. In the future, the Group will continue to explore the market for titanium alloy coils by actively coordinating with downstream customers to help them with better application in their projects. Meanwhile, the Group also hopes to move forward to the application scenarios of refined titanium alloys through more research and development application projects, further open up downstream markets and facilitate the mid-to-high end development of titanium alloys.

Since its formal introduction into the consumer goods market at the end of 2022, the Group's titanium alloy coil material has received wide recognition from end customers. The successful expansion of business channels for application of fine titanium alloy products into high-end consumer goods was of great significance for enhancing the Group's brand awareness and market competitiveness.

Marketing Strategy

The Group has been operating in collaboration with downstream mid-to-high end heat treatment technology and piece cutting service providers to achieve agile closed-loop management of after-sales services and enhance the customer service system in order to improve after-sales service capability and strengthen the understanding of customer needs.

Green Development

The Group has always been adhering to the core concept of "Green Development" and would never sacrifice the environment in exchange for corporate development. Over the years, the Group has invested heavily in environmental protection equipment, such as a large-scale wastewater treatment centre with a total investment of over RMB20 million. TG Tools, a subsidiary of the Company, was included in the list of "'City-level Green Factory' in 2022" released by the Industry and Information Technology Bureau of Zhenjiang City, becoming a city-level green factory. In the future, while vigorously developing its business, the Group will continue to devote itself to the cause of environmental protection and play a leading role in the "green manufacturing" system.

Information Technology

In order to cope with the Group's expansion of production capacity, international development, expansion of product lines, more precise and professional production processes and more diversified sales channels, the Group has invested heavily and developed a digital information system, "Digital Tiangong", which covers all business areas of the Group. The system completes the digital development of five areas: from sales to payment collection, purchases to payment, planning to resources, manufacturing to costs, and order to delivery, which will effectively improve the performance of network procurement, comprehensively enhance the synergy of the industrial supply chain, greatly enhance the competitiveness of the Group, and make the best preparation for transforming the Group to an amoeba management model. In the meantime, the second phase of the smart manufacturing project "Digital Tiangong" was officially launched in June 2021, enabling the Group to transform from traditional manufacturing to advanced manufacturing. "Digital Tiangong" is a project involving reform of management technology and methods. After two years of efforts, the Group has built a unified digital platform, which enables efficient operation of various business units of the Group, thus laying the foundation for more scalable development.

During the year under review, the Group's Tiangong Alloy Melting Smart Factory Project was officially launched. The completion of this comprehensive digitalization and informatization of the alloy melting workshop established a systematic management of the whole process from raw material warehouse to production workshop and then to finished product warehouse, as well as the transparent management of the production process.

Our Mission

The Group has always strived for innovation and advancements in competitiveness to consolidate its leading market position. The Group re-affirms its mission to maximise shareholder value, uphold high corporate governance standards and lead the industry to move forward.

Forward Looking Statements

This management discussion and analysis contains certain forward looking statements with respect to the financial condition, results of operations and business of the Group. These forward looking statements represent the Company's expectations or beliefs concerning future events and involve known and unknown risks and uncertainty that could cause actual results, performance or events to differ materially from those expressed or implied in such statements.

Forward looking statements involve inherent risks and uncertainties. Readers including shareholders and investors should be cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward looking statement.

Liquidity and Financial Resources

As at 31 December 2022, the Group's current assets included cash and cash equivalents of RMB1,219,843,000, inventories of RMB2,583,470,000, trade and other receivables of RMB2,632,708,000, pledged deposits of RMB140,041,000 and time deposits of RMB1,341,834,000. As at 31 December 2022, the interest-bearing borrowings of the Group were RMB2,895,313,000 (2021: RMB2,638,786,000), RMB1,866,813,000 of which was repayable within one year and RMB1,028,500,000 of which was repayable after less than one year. The Group's adjusted net debt-to-equity ratio, which is calculated based on adjusted net debt (defined as total interest-bearing borrowings plus unaccrued proposed dividends, less time deposits and cash and cash equivalents) divided by adjusted capital (comprising all components of equity, less unaccrued proposed dividends) as at 31 December 2022, was 6.2% (2021: 0.0%).

As at 31 December 2022, borrowings of RMB1,954,000,000 were in RMB, USD15,705,000 were in USD, EUR88,732,000 were in EUR and HKD194,115,000 were in HKD. The borrowings of the Group were subject to interest payable at rates ranging from 0.79%–4.75% per annum. There is no seasonality in borrowing requirements of the Group. The Group did not enter into any financial instruments to hedge itself against risks associated with interest rates and foreign currency exchange fluctuations.

During the year, net cash generated from operating activities was RMB303,553,000 (2021: RMB542,300,000). The decrease was mainly attributable to: (i) decrease in operating profit; and (ii) increase in the occupied working capital caused by the export sales to overseas customers.

Cash Conversion Cycle

The cash conversion cycle, calculated as turnover days over inventory, plus turnover days over trade receivables, minus turnover days of trade payables, attempts to measure the amount of time each net input dollar is tied up in the production and sales process before it is converted into cash through sales to customers. It is important to manufacturers because it measures the efficiency of their capital chain management.

The Group's turnover days of inventory for 2022 was 226 days (2021: 167 days). The increase in turnover days of inventory was mainly due to the stock up in preparation for expected overseas demand on tools steel and cutting tools products and the increasing cost of materials which boosted the average cost of inventories balance. The Group maintained an effective and efficient balance between the stock level and sales forecasts.

The Group's turnover days of trade receivables for 2022 was 150 days (2021: 124 days) while the turnover days of trade payables for 2022 was 114 days (2021: 110 days).

Accordingly, the Group's cash conversion cycle for 2022 was 262 days (2021: 181 days). The increase in cash conversion cycle was mainly driven by export business, unstable shipping capacity required higher inventory level and the longer credit periods for overseas customers. The management will continue to monitor closely the operations in view of the changing business environment.

It should be noted that the calculation of the aforesaid indexes may not be consistent with those measurement indexes published by other issuers.

Capital Expenditure and Capital Commitments

For 2022, the Group's net increase in property, plant and equipment amounted to RMB334,230,000, which was mainly related to addition of factory building after the acquisition of Tianguan Precision and expenditure on heavy-duty (7,000 tons) fast forging production line and was financed by a combination of our internal cash resources, operating cashflows and bank borrowings. As at 31 December 2022, capital commitments were RMB268,986,000 (2021: RMB1,022,087,000), of which RMB58,268,000 (2021: RMB138,169,000) were contracted for and RMB210,718,000 (2021: RMB883,918,000) were authorised but not contracted for. The majority of the capital commitments related to the construction of powder metallurgy tap production line and 1,600 tons fast forging machine production line and upgrading of metal wire production line and will be funded by internal resources and operating cash flows of the Group.

Placing of Shares and Use of Placing Proceeds

The Group placed an aggregate of 200,000,000 ordinary shares of par value of USD0.0025 each and representing 7.16% of the enlarged issued share capital of the Company at the placing price of HKD4.22 per share to not less than six placees (the "Placing"). The aggregate nominal value of the placing shares under the Placing was USD500,000. The placing of the 200,000,000 shares was completed on 7 May 2021 with the net proceeds of approximately HKD834 million representing a net issue price of approximately HKD4.17 per share. The market price of the placing share was HKD4.88 per share as quoted on the Stock Exchange on 4 May 2021, the last full trading day immediately before the time at which the Placing and Subscription Agreement was signed.

The proceeds from the Placing have been used as follows:

Intended use of proceeds from the placing		Actual use of proceeds (as at 31 December 2022)	Proposed use of the remaining unutilised proceeds (as at 31 December 2022)
(i)	Expansion of the industrial park of the Group in Thailand	HKD59.9 million was used in the expansion of the industrial park of the Group in Thailand	The remaining unutilised proceeds was nil
(ii)	Development of the new precision tools products of the Group	HKD359.2 million was used in development of the new precision tools products of the Group	The remaining unutilised proceeds was nil
(iii)	Replenishment of Group's working capital to procure raw materials and meet any cashflow requirements that may arise from daily operations	HKD415.3 million was used as working capital and for daily operation, including payment of electricity, staff salaries and procurement of raw materials	The remaining unutilised proceeds was nil

The proceeds from the placing was fully utilised.

Foreign Exchange Exposure

The Group's revenues were denominated in RMB, USD, EUR and THB, with RMB accounting for the largest portion of 38.5%. 61.5% of total sales and operating profit were subject to exchange rate fluctuations. The Group has put in place measures such as monthly review of product pricing in the light of foreign exchange fluctuations and incentivising overseas customers to settle balances on a more timely basis to minimise the financial impact of exchange rate exposures.

Pledge of Assets

As at 31 December 2022, the Group pledged certain bank deposits amounting to RMB140,041,000 (2021: RMB244,191,000) and certain trade receivables amounting to RMB145,131,000 (2021: RMB175,195,000). The decrease in pledged bank deposits was mainly due to the decrease in the outstanding balance of bank acceptance bills.

Material acquisition and disposal

On 19 August 2022, Precision Tools, a wholly-owned subsidiary of the Company, acquired the entire equity interest of Tianguan Precision. For further details, please refer to the Company's announcement dated 19 August 2022.

Further, on 12 October 2022, the Group through its wholly owned subsidiary TG Tech, entered into an agreement with a third party and acquired additional 25% equity interest of Jiangsu Tiangong Solomon Alloy New Material Co., Ltd ("Tiangong Solomon") through additional capital injection of RMB15,000,000. Upon the completion of the transaction, the Group held 55% equity interest in Tiangong Solomon and Tiangong Solomon became a subsidiary of the Group.

Save for the above, there were no material acquisitions or disposals of subsidiaries and associates of the Group during the reporting period.

Employees' Remuneration and Training

As at 31 December 2022, the Group employed 3,134 employees (2021: 3,108 employees). Total staff costs for the year amounted to RMB365,053,000 (2021: RMB360,069,000). The increase was mainly resulted from increase in headcount. The Group provided employees with remuneration packages comparable to market rates and employees are further rewarded based on their performance according to the framework of the Group's salary, incentives and bonus scheme. In order to enhance the Group's productivity, and further improve the quality of the Group's human resources, the Group provides compulsory continuous training for all of its staff on a regular basis.

Contingent Liabilities

Neither the Group, nor the Company, had any significant contingent liabilities at the end of the reporting period.

Principal Risks and Uncertainties

The main activities of the Group include production and sales of DS, HSS, cutting tools and titanium alloy. The Group is exposed to a variety of financial risks including credit risk, liquidity risk, currency risk and interest rate risk. In order to minimise the credit risk in relation to trade receivables, the Directors have delegated a team responsible for the determination of credit limits, credit approvals and other monitoring procedures to ensure that appropriate follow-up actions are taken to recover overdue debts. The Group has also purchased insurances relating to trade receivables. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of each reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. Therefore, the Directors consider that the Group's credit risk is significantly reduced. Details of the above main risks and measures for risk reduction are set out in note 34 to the financial statements.

Apart from the financial risks mentioned above, the Group is exposed to certain operating risks and uncertainties including rare metal price volatility and market demand.

Risks and uncertainties arising from rare metal price volatility

Rare metals represented a significant portion in the cost of materials of the Group's products. The price of rare metals significantly affected the per unit production costs of the Group's products. In view of the risk of rare metal price volatility, the Group has already engaged with rare metal suppliers to obtain discounted prices for purchasing rare metals over a fixed period of time. Moreover, since the price of rare metal is publicly available market information, the Group was capable to partially transmit the effect of rare metal price volatility to downstream customers. However, because of the transparency of the rare metal prices, in extreme situations where the rare metal price remained low, the Group could be under pressure to make downward pricing adjustments on our products.

Risks and uncertainties arising from market demand of the Group's products

The Group's business and profitability growth were affected by the uncertainties of global macroeconomic situations, which could materially affect the manufacturing industry. These uncertainties would eventually affect the demand of the Group's products. To minimise the effect of global macroeconomic uncertainties, the Group continued to develop new markets all over the world. The Group believes that the best way to manage such risks and uncertainties is to avoid reliance on demand from a particular economy.

In Compliance with Laws and Regulations

As a company listed in Hong Kong, the Company is subject to the regulations of the Securities and Futures Commission of Hong Kong and the Stock Exchange. Since the shares of Jiangsu Tiangong Technology Company Limited ("TG Tech"), a 74.02% owned subsidiary of the Company, are quoted on the National Equities Exchange and Quotations System (the "NEEQ System"), TG Tech is subject to the regulations of the NEEQ System. Also, various PRC government authorities, particularly the State Environmental Protection Administration, have the authority to issue and implement regulations governing various aspects of special steel production. The Group will constantly update and ensure compliance with new rules and regulations issued by these regulators.

As at 31 December 2022 and up to the date of this report, the Board was unaware of any non-compliance with the relevant laws and regulations that had a significant impact on the Group.

Relationships with Key Stakeholders

(i) Employees

The Group recognises human resources as assets important to the Group's development and growth. Most of the Group's employees were working at the manufacturing plant in Zhenjiang City, the PRC. The Group provided employees with remuneration packages comparable to the market rates and employees were further rewarded based on their performance according to the framework of the Group's salaries, incentives and bonuses scheme. In order to enhance the Group's productivity, and further improve the quality of the Group's human resources, the Group provided compulsory continuous training for all of its staff on a regular basis.

As at 31 December 2022, the gender ratio of the Group's workforce (including the Company's senior management) was approximately 71.75% male to 28.25% female. The Company's hiring is merit-based and non-discriminatory. Due to the nature of the businesses involved, it is common for there to be a higher number of male employees hired and therefor the Board is satisfied that the Company has achieved gender diversity in its workforce.

(ii) Suppliers

The Group's suppliers mainly supplied us with raw materials and utilities in the PRC. The Group developed longstanding and good relationships with its suppliers. Our procurement department conducted regular meetings with the suppliers of raw materials and utilities to ensure that raw materials supplied and utilities were in stable supply and of good quality.

(iii) Customers

The Group established long-term cooperation relationships with major customers. The sales team in domestic and overseas sales offices visit and discuss with customers regularly so as to keep us well-informed of market information and changes.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

1 About the Environmental, Social and Governance Report

1.1 Reporting Guideline

This is the seventh Environmental, Social and Governance Report (the "ESG Report") published by Tiangong International Company Limited (the "Company") and its subsidiaries (collectively referred to as the "Group" or "we"). The ESG Report mainly introduces the environmental, social and governance ("ESG") performance of the Group in 2022.

The ESG Report has been prepared by the Company in accordance with the *Environmental, Social and Governance Reporting Guide* (the "ESG Guide") under the latest revised Appendix 27 to the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited* (the "Listing Rules") issued by the Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The ESG Report shall be read in conjunction with the section "Corporate Governance Report" of *Tiangong International Company Limited Annual Report 2022* (the "Annual Report 2022") for a comprehensive understanding of the Group's ESG performance.

1.2 Reporting Scope

Unless otherwise stated, the organization scope of the ESG Report covers the Company and its major subsidiaries. Other subsidiaries and associates of the Group that are not directly engaged in production activities have relatively minor impacts on the overall environmental and social performance of the Group and are therefore not included in the reporting scope of the ESG Report.

Unless otherwise stated, the ESG Report covers the period from 1 January 2022 to 31 December 2022 (the "Reporting Period"), which is consistent with the Annual Report 2022.

1.3 Report Statement

The Board of Directors of the Company (the "Board") has overall responsibility for the Company's ESG strategy and reporting. The Board is responsible for assessing and determining the ESG risks within the Group's operational boundaries scope and ensures that the appropriate and effective ESG risk management and internal control systems are in place. The Group's ESG approaches, strategies and materiality assessment will be specifically disclosed in the sections of the ESG Report.

The information contained in the ESG Report is sourced from the official documents and statistical reports of the Group. The ESG Report has complied with all mandatory disclosure requirements and the "comply or explain" provisions of the ESG Guide, and has applied the following reporting principles in the ESG Guide:

"Materiality" principle

Through the review of material issues, the Group identified and confirmed the material issues applicable to the Group during the Reporting Period and focused on the disclosure of relevant issues in this ESG Report.

"Quantitative" principle

To comprehensively assess the Group's ESG performance during the Reporting Period, the Group disclosed measurable key performance indicators, which are set out in the ESG Guide and applicable to the Group, and specified the sources of standards, methods, assumptions and calculations used by the measurable KPIs, including the sources of the conversion factors.

"Consistency" principle

Unless otherwise stated, this ESG Report adopts the same preparation and data calculation methods as the previous Reporting Period so that readers could make meaningful comparisons of the ESG information in the ESG Report.

"Balance" principle

This ESG Report follows the principle of balance and objectively presents the Group's ESG performance and management status during the Reporting Period.

1.4 Form of Report Publication

The ESG Report is published in two languages — Traditional Chinese and English. In the event of discrepancies between the Traditional Chinese version and the English version, the Traditional Chinese version shall prevail. You could access the Traditional Chinese and English PDF versions of the ESG Report via the Company's website at http://www.tggj.cn/ and the Stock Exchange's HKEX news website at https://www.hkexnews.hk/index_c.htm.

1.5 Feedback on the ESG Report

Should you have any comments or questions about the Group's ESG work, you are welcome to contact us by email.

Email: tiangongir@tggj.cn

2 Consolidate Governance and Promote Sustainable Development

2.1 ESG Governance Structure

The Board has incorporated sustainability governance matters into its agenda. During the Reporting Period, we promoted the in-depth integration of ESG issues and corporate governance structure to help the Group to move toward sustainable development. Meanwhile, to further ensure the transparency and accountability of all operating activities of the Group, the Board adheres to the principles of corporate governance, complies with laws and business standards, and maintains continuous attention in areas such as internal control, fair disclosure and accountability to all shareholders.

A simple and effective ESG governance structure can better respond to and implement relevant ESG governance strategies and measures. We have built a top-down ESG governance structure to meet the needs.

The Board is the highest responsible body for the Group's ESG issues, comprehensively supervises the Group's ESG governance, and is responsible for the formulation and review of the Group's ESG development strategies and goals. The Board leads and participates in the assessment, determination, and review of the Group's ESG issues, including ESG risks, to ensure the implementation and improvement of appropriate and effective ESG risk management and internal control systems. Under the leadership of the Board, the Group strictly complies with the laws and regulations of the places where it operates in the decision-making process of major issues, and has formulated internal regulations, policies and procedures related to ESG issues based on the actual situation of the Group to ensure the standardization and implementation of relevant governance work.

In addition, to further integrate ESG concepts into corporate governance and comprehensively improve the Group's sustainable development management. The Board has set up an ESG Working Group, which is led by head of the Office Administration, the Financial Controller and the head of the Securities Investment Department of the Company. Members of the Company's ESG-related departments are appointed by the Company, and the persons connected with the subsidiaries are jointly appointed as members of the group. The responsibilities of the ESG Working Group include:

➢ Assist the Board to coordinate and supervise the implementation of the Group's ESG policies and the implementation of ESG strategies;

➢ Review the progress of ESG development goals;

➢ Continue to follow up on the latest developments and trends in sustainable development of the industry;

➢ Report material ESG issues and potential ESG risks to the Board;

➢ Regularly collect ESG-related data and information to assist the preparation of the ESG report.

The Group has set medium and long-term directional targets for environmental aspects, and the Board is responsible for the progress of the implementation of such targets and the review of performance. During the Reporting Period, the Group controlled and supervised the implementation of specific action measures for environmental objectives, to ensure the continuous progress in achieving the objectives and actively explore the feasibility and preparation work for setting more ambitious targets.

2.2 ESG Risks

The Board has overall responsibility for the Group's risk management and internal control systems and for reviewing their effectiveness on an ongoing basis. At the same time, the Board understands the industry's ESG risks and incorporates ESG risk management into the existing risk management and internal control systems. Through the effective operation of risk management and internal control procedures, the Board identifies, assesses, prioritizes, and manages its major risks in achieving business objectives and ESG-related risks.

The Group comprehensively assesses and identifies major ESG risks, providing an important reference for targeted improvement of ESG management in the future. Firstly, the Group has established a list of potential ESG risks based on the research and identification of global trends and key ESG risks faced by the steel industry. Subsequently, the Group conducted an assessment based on the list of potential risks, prioritized relevant risks, and finally identified material ESG risks. Among them, "Insufficient Employee Development and Training", "Employee Health and Safety Incidents" and "Product Quality Risk" risks are identified as the most important ESG risks of the Group. The Group's risk management is as follows:

ESG Risks	Risk Description	Management Measures
Insufficient Employee Development and Training	Inappropriate or inadequate training will lead to waste of resources and hinder the achievement of future strategic objectives due to the insufficient employee capabilities, impend the business development and is not conducive to the productivity improvement of the corporate.	• Implement the *Measures for the Administration of Induction Training for New Employees* to standardize the management of induction training for new employees, assist new employees to get familiar with the Group's culture and system as soon as possible and become competent for their new positions; • For the training of technical talents, adopt a one-to-one apprenticeship programme and formulate the *Interim Measures for the "Master-Apprentice" Programme* to standardize the system rules and clarify the responsibilities of the mentors and apprentices; • The Group and various departments hold staff training activities with different themes on a regular and irregular basis every year, such as credit risk training and sales staff comprehensive quality training.

ESG Risks	Risk Description	Management Measures
Employee Health and Safety Incidents	Steel production needs to be conducted in a high-temperature and high-pressure environment. During the production process, hazardous substances such as dust and waste smoke are also produced, so the working environment is subject to certain safety risks. If there is an absence of comprehensive and strict safety management policies, measures and training, the frequency and severity of employee safety accidents may be increased. The occurrence of safety accidents may damage the reputation of the enterprise, and the enterprise may need to pay a large amount of compensation.	• Implement the *Occupational Health and Safety Management System*, clearly list the safety management specifications of various production work to guide employees' daily work; • Implement the *Liability System for Safety Production*, which stipulates the safety production responsibilities of leaders at all levels, functional departments, engineering and technical personnel and post operators. The Safety and Environmental Protection Department ("SEP Department") is responsible for the Group's production safety, and a three-level management structure of "Chief Executive Officer — Head of SEP Department — Safety Officer" has been established; • Implement the *Safety Training System*, which stipulates that all employees must receive strict safety training and the safety training is divided into three levels. Employees can only perform their duties after being familiar with all safety management systems and signing the *Letter of Undertaking of Safety Production for Employee*; • Implement the *Safety Inspection System*, clarify the contents and processes of system inspection and hidden danger inspection, and regularly carry out safety inspection at different levels of the Company, workshops and teams; • Implement the *Reporting System of Safety Work*, which stipulates the reporting time, process and content of safety production work of each department;

ESG Risks	Risk Description	Management Measures
		• Implement the *Emergency Response Plan*, listing out the types of major emergencies identified by the Group and the corresponding measures, conduct regular emergency drills, and review the *Emergency Response Plan* annually, and make amendments if necessary; • Provide entry physical examination, annual physical examination and resignation physical examination to ensure the health of employees.

ESG Risks	Risk Description	Management Measures
Product Quality Risk	The product quality of an enterprise affects customers' satisfaction and confidence in the enterprise. If the enterprise's products fail to meet the standards and no proper internal recall procedures are formulated, it may lead to the loss of customers and affect the performance of the enterprise.	• Implement product life cycle quality control, formulate and implement product quality control system in accordance with GB/T19001-2016/ISO9001: 2015 *Quality management system-Requirements*; • Carry out product quality measurement management in accordance with GB/T19022-2003/ISO10012: 2003 *Measurement management systems-Requirements for measurement processes and measuring equipment*; • Formulate and implement procedures and product quality control manuals such as the *Management Procedure for New Product Development*, the *Control Procedure for Self-Made Unqualified Product* and the *Enterprise Measurement Management Regulation*; • Take a series of measures to ensure the health and safety of products: conducting sample chemical tests on raw materials; conducting strict physical and chemical tests on semi-finished products at various stages of the production process; conducting a series of product quality tests on finished products; obtaining quality warranties before launching to the market; • The Sales Department handles customer complaints in accordance with the *Control Procedure for Self-Made Unqualified Product* and takes appropriate measures to solve the problem of unqualified products.

3 Stakeholder Engagement and Materiality Assessment

3.1 Communication Channels with Stakeholders

The Group's sustainable development is inseparable from its stakeholders. Their opinions and expectations are the key driving forces for the Group's sustainable development. Therefore, the Group maintains close contact with stakeholders through general meetings, company announcements, regular reports, road shows, etc., to understand their expectations, needs, and concerns about sustainable development issues and opinions and suggestions in a thorough manner, which serves as an important basis for the Group to improve sustainable development and determine the key disclosures in the ESG Report. During the Reporting Period, the concerns, and expectations of various stakeholders on the Group, as well as the Group's daily communication channels with them, are as follows:

Stakeholder Groups	Expectations	Communication Methods	Communication Frequency	Actions in Response
Shareholders and investors	Investment returns Corporate governance Regular communication	General meeting Company announcements Regular reports Roadshows	Annually/quarterly/ irregularly	➢ Continuously improving risk management and internal control system ➢ Strengthening information disclosure and conducting regular communication
Government	Compliance with laws and regulations Paying tax according to laws	Supervision and assessment Information disclosure	Regularly/ irregularly	➢ Strictly abiding by national laws and regulations and implementing compliance work ➢ Actively cooperating with regulatory authorities ➢ Paying tax according to laws
Customers	High-quality products Quality management Service guarantee	Contracts and agreements Customer service Service feedback Customer Annual Conference	Annually/quarterly/ irregularly/twice a year	➢ Continuously improving production management system ➢ Promoting scientific research and innovation to improve production quality and efficiency
Employees	Employee rights and benefits Health and safety Promotion and training	Labor contracts Employee conferences Employee activities Employees' Representatives Conference	Regularly/ irregularly	➢ Improving human resources management system to ensure employees' rights and benefits ➢ Implementing measures relating to employees' occupational health and safety ➢ Developing training plans to broaden the development path of employees ➢ Collecting and reviewing employees' proposals

Stakeholder Groups	Expectations	Communication Methods	Communication Frequency	Actions in Response
Suppliers and other business partners	Being fair and just Win-win cooperation	Contracts and agreements Supplier assessments Communication meetings	Annually/irregularly	➢ Ensuring fair and transparent tendering and procurement process ➢ Fulfilling contracts and agreements
Communities	Community development Environmental protection	Community communication Charitable contribution Eco-friendly events	Regularly/ irregularly	➢ Participating in harmonious community construction ➢ Actively carrying out charity donation activities ➢ Implementing environmental protection work

3.2 Materiality Assessment

The Group regularly conducts materiality assessment, continuously improves the work mechanism and methods of materiality assessment, invites different stakeholders to participate in the materiality assessment of sustainable development issues, aiming to consolidate the opinions of all parties on different issues and conduct assessment, to further clarify the key issues of sustainable development and the next step of efforts. The valuation target comprehensively covers internal and external stakeholders of the Group, and the assessment involves five steps, details of which are as follows:

1. *Identify Key Stakeholders*

   Through the comprehensive assessment of the two dimensions of "the Group's influence on stakeholders" and "the influence of stakeholders on the Group", the Group identified the following key stakeholders and invited them to participate in the materiality assessment.

   ✓ The Board

   ✓ The Government

   ✓ The Management

   ✓ Shareholders and Investors

   ✓ Employees

   ✓ Customers

   ✓ Suppliers

   ✓ Business Partners

2. *Identify Relevant ESG Issues*

   The Group refers to the ESG Guide and considers the ESG trends in the steel industry to identify an ESG issues inventory relevant to the Group.

3. *Conduct Questionnaire Survey*

The Group invited major stakeholders to rank the importance of ESG issues through questionnaires. External stakeholders (the government, shareholders and investors, customers, employees, business partners and suppliers) ranked the importance of ESG issues from the dimensions of "Importance to Stakeholders"; internal stakeholders (the Board and the management) ranked the importance of ESG issues from the dimensions of "Importance to the Group".

4. *Analyse the Survey Result*

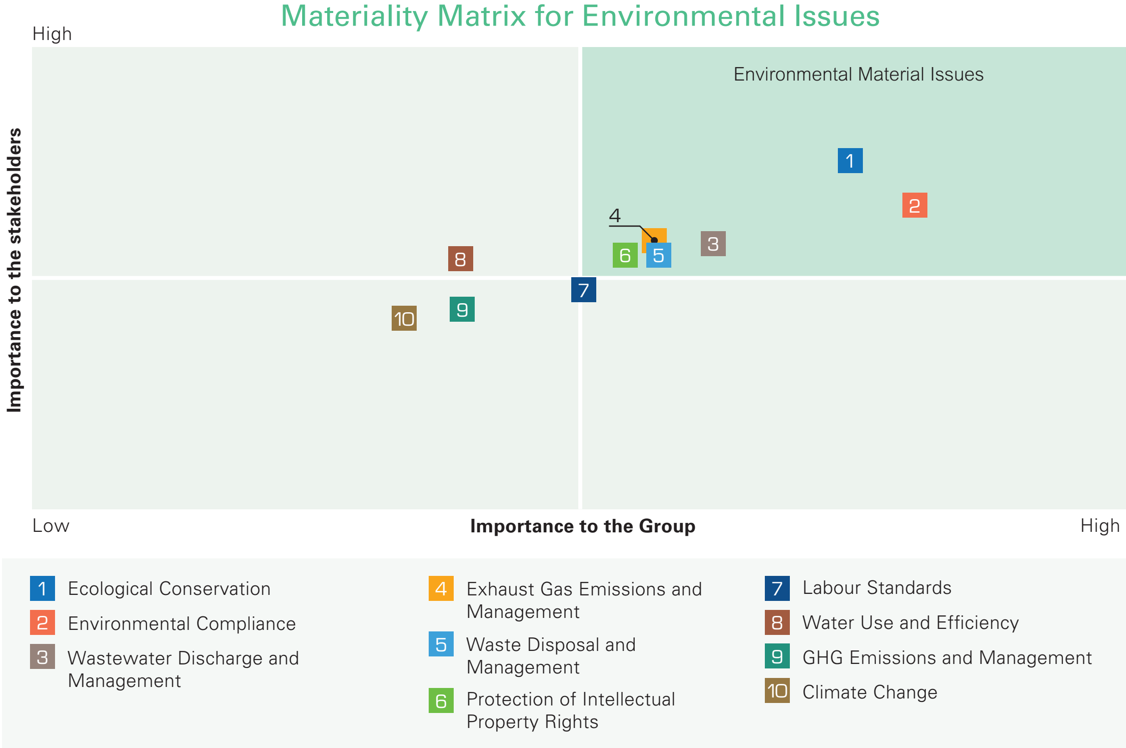
The Group analysed the results of the questionnaire survey to build the materiality matrices and identified the issues with high scores in both "Importance to Stakeholders" and "Importance to the Group" as "Material Issues".

5. *Verify Material Issues*

The Board reviewed the survey results and verified the material issues.

The following are two matrices of material issues in environmental and social aspects:

Materiality Matrix for Environmental Issues



Materiality Matrix for Social Issues

From the analysis of the materiality matrix, the Group has identified a total of six material ESG issues in environmental aspects and eight in social aspects. Considering the business development and the Group's ESG management process, and upon review by the Board and the management, the Group added "Employee Development and Training", "Focus on the Development Trend of Downstream Market Demand for Steel Types" and "Local Community" as material issues, and a total of 17 material issues were identified. These issues are the key disclosures in the ESG Report.

Material Issues (from high to low materiality)	
ENVIRONMENTAL ASPECTS	**SOCIAL ASPECTS**
1. Ecological Conservation	1. Health and Safety of Employees
2. Environmental Compliance	2. Social Compliance
3. Wastewater Discharge and Management	3. Scientific Research and Innovation
4. Exhaust Gas Emission and Management	4. Customer Satisfaction
5. Waste Disposal and Management	5. Quality Control and Management of Product and Service
6. Energy Use and Efficiency	6. Protection of Intellectual Property Rights
	7. Labour Standards
	8. Health and Safety of Product and Service
	9. Employee Development and Training
	10. Focus on the Development Trend of Downstream Market Demand for Steel Types
	11. Local Community

This ESG Report focuses on the above material issues and disclose the corresponding ESG management strategies and performance of the Group in each chapter in response to the major concerns of key stakeholders.

4 Energy Conservation and Emission Reduction to Practice Green and Low Carbon

The Group is principally engaged in the production of steel, titanium alloy and cutting tools, and has been committed to managing and minimizing the environmental impact of its operations. The Group adheres to the environmental protection policy of "Green Production, Energy Conservation and Emission Reduction, Prevention First, Comprehensive Treatment", comprehensively strengthens environmental protection production, eliminates major environmental accidents, and is committed to reducing the negative impact of production and operation on the environment. On the basis of complying with the laws, regulations and national standards that have a significant impact on the Group's relevant business operations, including but not limited to the *Cleaner Production Promotion Law of the People's Republic of China*, the *Environmental Protection Law of the People's Republic of China*, the *Atmospheric Pollution Prevention and Control Law of the People's Republic of China* and other relevant laws and regulations in the places where the Group operates, the Group has formulated and implemented the *Environmental Monitoring Management System*, the *Wastewater, Exhaust Gas and Noise Prevention and Control Regulation*, and the *Environmental Monitoring Management System*.

The Group strives to effectively control the factors that may have potential adverse impacts on the environment in its operations and reduce the impact on the environment and the consumption of natural resources and take the initiative to shoulder its environmental responsibilities. To ensure the effective implementation of relevant policies, the Group has formulated a series of rules and regulations, such as the *Environmental Monitoring Management System*, the *Environmental Protection Responsibility System*, and the *Environmental Protection Statistics Management System*, to clarify the specific environmental protection responsibilities of each department and personnel in each link of production and management. At the same time, the Group implements the *Environmental Protection Reward and Punishment Management System*, which links the performance of environmental protection with the personal performance of employees, and effectively urges employees to strictly comply with environmental protection requirements, to achieve environmental protection targets more effectively. In addition, the Group has implemented the *Environmental Protection Training and Education Management System*, based on which the Group actively carries out occupational environmental protection education and training for employees, and issues occupational health notices to enhance the environmental protection awareness of all employees.

Most of the Group's subsidiaries have obtained ISO 9001 Quality Management System Certification and ISO 14001 Environmental Management System Certification. To effectively manage the environmental performance of each subsidiary of the Group, the general manager of each subsidiary is appointed as the first responsible person for environmental protection and is fully responsible for the environmental protection work of each subsidiary of the Group, including formulating environmental protection strategies and monitoring relevant risks and results. At the same time, the Group has established the SEP Department, which is responsible for formulating and implementing the environmental management system and operating procedures for environmental protection equipment and facilities within its jurisdiction, and is responsible for solving the problems in environmental protection and potential environmental hazards within its jurisdiction; responsible for the daily maintenance of environmental protection equipment and facilities within its jurisdiction, ensuring normal operation, and establishing environmental protection equipment and facilities operation ledgers and records; responsible for the management of pollutants within the jurisdiction, no environmental pollution accidents, and establish a pollutant storage and transfer ledger and records. The SEP Department holds monthly meetings to summarize the environmental priorities of the current month and the following month, to ensure the Group's environmental compliance and improve the level of environmental governance.


CERTIFICATE

Environmental Management Systems Certificate

CQM hereby certifies that

Jiangsu Tiangong Precision Tool Co.,LTD

has implemented and maintains a Environmental Management System which fulfils the requirements of the following standards

GB/T 24001-2016/ISO 14001:2015

Environmental management systems-Requirements with guidance for use

This certificate is valid to the following product(s)/service:

Design and production of high-speed tool steel twist drill, high-speed tool steel screw tap and related management activities

Issued on: 2020-10-30

Effective date: 2020-10-30

Validity Date: 2023-10-29

CHINA QUALITY MARK CERTIFICATION GROUP


CERTIFICATE

Environmental Management System Certificate

CQM hereby certifies that

JIANGSU TIANGONG TOOLS NEW MATERIALS CO.,LTD.

the management system conforms to

GB/T 24001-2016/ISO 14001:2015

This certificate is valid to the following scope:

Design and production of high speed steel and die steel; titanium alloy ingot forging and rolling and related management activities


CERTIFICATE

Environmental Management Systems Certificate

CQM hereby certifies that

Tiangong Aihe Special Steel Co., Ltd.

has implemented and maintains a Environmental Management System which fulfils the requirements of the following standards

GB/T 24001-2016/ISO 14001:2015

Environmental management systems-Requirements with guidance for use

This certificate is valid to the following product(s)/service:

Issued on: 2020-12-10

Effective date: 2020-12-10

Validity Date: 2023-12-14

CHINA QUALITY MARK CERTIFICATION GROUP

A number of subsidiaries of the Group have obtained GB/T 24001-2016/ISO 14001: 2015 environmental management system certifications, including but not limited to Jiangsu Tiangong Precision Tool Company Limited, Jiangsu Tiangong Tools New Materials Company Limited, Tiangong Aihe Special Steel Company Limited, etc.

During the Reporting Period, all departments of the Group's headquarters and subsidiaries at all levels signed the *2022 Environmental Production Responsibility Statement* and set the following annual management objectives:

Environmental Management Targets	
0 Significant environmental pollution incident	0 Serious environmental pollution incident
Not more than 5 times Excessive emissions or data anomalies	100% Standardized disposal of hazardous waste

During the Reporting Period, the above annual management objectives have been successfully achieved.

4.1 Environmental Objectives

During the Reporting Period, to achieve medium and long-term environmental-related targets, the Group has supervised the implementation of specific action measures for environmental directional goals. The specific actions are as follows:

Medium and long-term environmental targets	Action plan	Specific actions	Implementation progress
Reduce direct and indirect greenhouse gas (GHG) emissions	➢ Implement the *Carbon Emission Management System* to clarify the focus on improving energy efficiency and using new energy and renewable energy; ➢ Encourage employees to take public transportation for commuting and replace part of long-distance business travel with online remote meetings; ➢ When selecting suppliers, the carbon emission density of suppliers' products is taken into consideration, and local suppliers are selected as far as possible to reduce vehicle emissions from transportation logistics in the supply chain; ➢ Reduce the total amount of waste entering landfill as much as possible by reducing waste and increasing recycling rate.	➢ Promoted carbon emission guidelines and policies; ➢ Developed strict energy consumption assessments based on different processes and product structures, and incorporate them into the assessment of all employees; ➢ Promoted energy-saving transformation of third-party equipment; ➢ Promoted the Company's solar projects; ➢ Set up factory vehicles to provide convenience for employees to commute, and chose new energy vehicles for factory vehicles; ➢ Metal filter residue (oxidation scale and wheel ash) was directly returned to the furnace for smelting to reduce GHG emissions during the disposal of metal filter residue.	Ongoing

Medium and long-term environmental targets	Action plan	Specific actions	Implementation progress
Reduce air pollutant emissions	➢ Improve exhaust gas treatment and recycling technology and equipment, improve the level of exhaust gas treatment and recycling, and reduce exhaust gas emissions; ➢ Accelerate energy transformation, reduce the proportion of heavily polluted energy, and reduce direct and indirect air pollutant emissions. For example, use more environmentally friendly natural gas as energy for boilers and heating furnaces, and further increase the proportion of solar energy use to reduce purchased electricity.	➢ Transformed smelting waste gas treatment equipment by third-party operation and maintenance; ➢ Established low-emission online monitoring in compliance with government regulatory requirements; ➢ Used clean energy (natural gas) and completely decommission heavy polluting fuels (coal); ➢ Cooperated with third parties to promote the construction of solar photovoltaic systems.	Ongoing

Medium and long-term environmental targets	Action plan	Specific actions	Implementation progress
Reduce waste discharge	➢ Reduce the generation of hazardous waste (such as waste acid and alkali liquid, dust, waste oil, waste batteries, waste lubricating oil, etc.) and non-hazardous waste (such as slag, domestic waste, kitchen waste, construction waste, etc.) from the source through comprehensive methods and means such as technology application and equipment update; ➢ Increase the recycling rate and reuse rate of waste through various means, such as reuse the recycled lubricating oil treated by the waste lubricating oil treatment plant, and store non-hazardous waste separately and send them to professional organisations for recycling, so as to reduce the total amount of waste sent to landfill from the end.	➢ Reduced the processing volume of acid-base washing and reduced the amount of acid-base washing by more than 30% through throwing away; ➢ A new filter press filtration circulation system was adopted for cooling oil to reduce the recycling efficiency of cooling oil; ➢ Cooperated with third parties to promote the recycling of purified lubricating oil and hydraulic oil.	Ongoing

Medium and long-term environmental targets	Action plan	Specific actions	Implementation progress
Improve energy efficiency	➢ Further reduce energy consumption through multiple channels and reduce energy waste from the source, such as strengthening power-saving education, adopting customized lighting systems in office areas, refining energy consumption statistical analysis, and strengthening energy assessment systems; ➢ Use cleaner energy to accelerate the Group's energy transformation, such as further increasing the proportion of solar energy.	➢ Strengthened energy consumption assessment, assessed personnel by process and variety, combine salary reform and encourage management innovation to reduce energy consumption; ➢ Cooperated with third parties to promote the construction of solar photovoltaic systems.	Ongoing
Improve water efficiency	➢ Save water and control water consumption from the source, such as installing water meters for each department, strengthening water use assessment system, and gradually installing inductive intelligent water-saving equipment; ➢ Improve the recycling rate of wastewater, promote the circular economy model, optimise the existing water recycling system of the Group, and reuse the treated wastewater for cooling production equipment.	➢ All employees advocated saving one drop of water, one piece of paper and one kilowatt of electricity and the Power Department was responsible for the monitoring and assessment of water use; ➢ For the recycling of industrial water, the Company built its sewage treatment system in 2010 and treated industrial wastewater as circulating cooling water to replenish water.	Ongoing

4.2 Emission Management

The major emissions of the Group are sewage, exhaust gas, GHGs and hazardous and non-hazardous wastes. In order to ensure that all emissions in the production and operation process are in compliance with national standards, the Group has formulated and implemented internal management systems such as the *Regulations on the Discharge of Industrial Wastewater*, the *Procedures for the Control of Solid Waste*, the *Procedures for Prevention and Control of Pollution from Wastewater, Waste Gas and Noise,* and the *Responsibility System for Prevention and Control of Environmental Pollution of Tiangong*. The Group strictly controls emissions reduction in the operation process and optimizes the utilization efficiency in the research and development process to effectively reduce various emissions. At the same time, all subsidiaries are required to formulate and implement corresponding systems in accordance with the Group's requirements and their respective actual conditions to strictly control pollutant emissions and effectively reduce various emissions. In addition, the Group also has a real-time monitoring system to monitor the discharge data of sewage and exhaust gas to further ensure that the emissions meet the national emission standards.

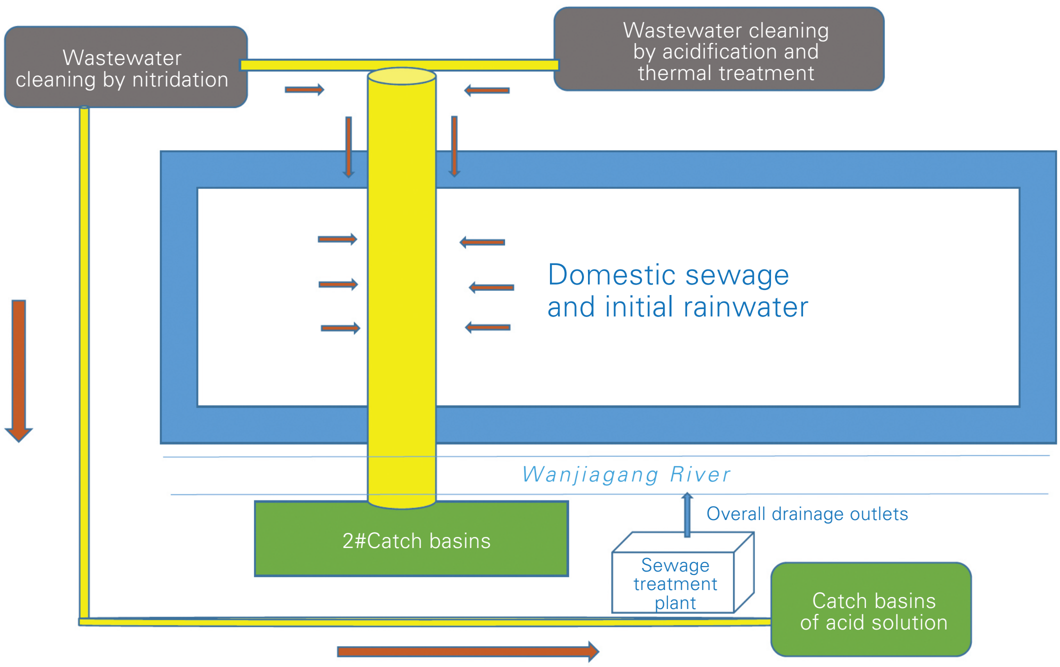
Wastewater

The Group's sewage mainly comes from production and domestic emissions, of which production sewage mainly includes the discharge of coolant during the production and processing process and circulating water in the process. In order to comply with the requirements of the *Water Pollution Prevention and Control Law of the People's Republic of China* and the *Integrated Standard for Sewage Discharge (national standard GB8978–1996)* to regulate sewage discharge, the Group has formulated the *Management Measures for Prevention and Control of Water Pollution* to clarify the division of responsibilities for sewage discharge and management.

Jiangsu Tiangong Tools New Materials Company Limited has set up a sewage treatment station. The Sewage Treatment Station Management System ensures that the sewage meets the discharge standards before being discharged. Jiangsu Tiangong Tools New Materials Company Limited has set up a wastewater treatment center for the treatment of oily wastewater such as emulsion waste liquid and grinding coolant. To treat other comprehensive wastewater, a mixed wastewater treatment station is set up to centralize the treatment of various industrial wastewater and domestic sewage of the Company. Oily wastewater, such as emulsion waste liquid and grinding waste liquid, generated by each subsidiary and department of Jiangsu Tiangong Tools New Materials Company Limited is collected and transported by each department to the wastewater treatment center for treatment in accordance with the regulations, and cannot be discharged without permission. The wastewater treatment center is responsible for the centralized treatment of oily wastewater such as emulsion waste liquid and grinding waste liquid generated by each subsidiary and department. The comprehensive wastewater treatment station is responsible for the treatment of other industrial wastewater and domestic sewage. The staff of the wastewater treatment station must strictly implement the water treatment operation procedures, treat the wastewater in compliance with the standards, monitor the water quality and volume, and keep monitoring records. Wastewater that has not been treated or treated to the standard shall not be discharged. The SEP Department is responsible for the inspection of pollutant emissions and entrusts third-party monitoring agencies or assists environmental protection departments in carrying out the inspection. If any abnormal or excessive discharge of sewage is found, the SEP Department will find out the causes and take corrective measures in a timely manner, and report to the superior, and improve the preventive measures to prevent the same from happening again.

In addition, we have also set up special rainwater pipelines to separate rainwater and sewage and prohibit the discharge of sewage into rainwater pipelines. At the same time, we avoid the open storage of production and domestic waste to ensure that rainwater is not polluted. To prevent the impact of sewage leakage on the environment, we regularly inspect sewage discharge pipelines and treatment facilities to prevent sewage leakage.

In order to reduce the amount of sewage discharged, the Group has a water recycling system to recycle the treated sewage for cooling the production facilities.



Jiangsu Tiangong Tools New Materials Company Limited Wastewater Collection and Treatment Discharge Diagram

Exhaust Gases

The Group's air emissions mainly come from the combustion of natural gas. In order to standardize the exhaust gas emission and management, the Group has formulated and implemented the *Air Pollution Prevention and Control Management Regulations* to clarify the division of responsibilities and work processes of exhaust gas management and emissions. The SEP Department of the Group is responsible for the formulation of air pollution prevention and control objectives and the supervision and management of air pollution sources. The workshops of each subsidiary are responsible for ensuring the normal operation of environmental protection equipment of their respective departments, and strictly controlling the exhaust emissions during the production process of their respective departments.

In order to reduce exhaust gas emissions, the Group used natural gas that causes less pollution on environment as fuel. Meanwhile, the Group also renovated the reheating furnaces and soaking furnaces, and installed efficient exhaust gas treatment equipment to ensure that exhaust gas emissions meet national and industry standards. At the same time, as the Group's business operations also generate smoke and fumes, our production workshops are equipped with efficient smoke and dust disposal devices and oil fume collection devices to reduce the emission of relevant pollutants. The equipment maintenance department of each production workshop of the Group regularly inspects and maintains the equipment to ensure its normal operation, so as to avoid additional exhaust gas emissions caused by equipment failure or low operating rate.

In addition, the Group's *Wastewater, Exhaust Gas and Noise Prevention and Control Regulation* also sets specific requirements for the emission and management of dust particles. Through a series of measures such as regulating the storage of powder materials, avoiding the crushing of raw materials outdoor during windy days, and sprinkling water to dust-prone places in dry weather to reduce dust, dust pollution incidents are effectively prevented.

Hazardous and Non-hazardous Waste

The Group focuses on strengthening the management of waste, and has formulated the *Waste Management Code*, which sets out the requirements for the collection, storage, and disposal process of all types of waste. The documents clearly define and classify the wastes generated by the Group and have different standards and treatment rules for different wastes. The Group strictly implements this procedure to control the entire process of waste disposal and avoid environmental pollution caused by improper waste disposal.

The Group's hazardous waste mainly comes from waste acid and alkali liquid, dust, waste oil, waste batteries and waste lubricating oil generated during the production process. The Group has formulated the *Standard for Pollution Control on the Storage and Disposal Site for General Industrial Solid Wastes (GB 18599-2001)*, which stipulates that industrial solid wastes and the disposal site shall establish an inspection and maintenance system. The Group regularly inspects and maintains facilities such as embankments, dams, retaining walls, and diversion channels, discovering possible or abnormal damages, and shall take necessary measures in a timely manner to ensure normal operation. The Group shall establish a file system for users of storage and disposal sites, record the types and quantities of general industrial solid wastes and the following information in detail and keep them for long-term reference. At the same time, the Group has also formulated the *Hazardous Waste Management System* to regulate the management of hazardous waste, including management responsibility, management plan, classified storage and transportation, accident handling, etc. The Group's SEP Department is responsible for the daily management of hazardous waste, including monitoring the waste management of each production unit, improving the environmental monitoring system, monitoring and spot-checking the disposal of various types of waste. We put identification labels and warning signs on hazardous wastes, and then classify and transport them to the special storage points for hazardous wastes for further disposal by qualified third parties and record the disposal volume of various types of hazardous wastes. In addition, in order to reduce the amount of waste lubricating oil, the Group recycles the waste lubricating oil treated by the waste lubricating oil treatment plant. During the Reporting Period, the Group recycled and reused waste lubricating oil of 320 tons.

The Group's non-hazardous waste mainly includes slag, domestic waste, food waste and construction waste generated during the production process. The Group classifies recyclable non-hazardous wastes and stores them in the warehouse, and records the relevant quantity and storage date, etc., for recycling by waste recyclers. During the Reporting Period, the Group actively recycled wastepaper, with the volume of wastepaper recycled reaching 131 tons. We have also signed an agreement with the local sanitation department to entrust external personnel to transport the Group's general domestic waste or transport it to the designated waste landfill designated by the government.

4.3 Resource Use Efficiency

The Group adheres to the principle of "Reduce, Reuse and Recycle" and is committed to improving the efficiency of resource use and reducing the negative impact of our operations on the environment.

Efficiency of Water and Electricity Consumption

In order to improve the efficiency of the Group's use of water and electricity and reduce waste of resources, the Group has formulated and implemented internal regulations such as the *Water-saving and Electricity-saving Management System* and the *Electricity-saving Management Regulations*. The Power Section of the Group is responsible for the daily management of electricity consumption and has designated energy management personnel to implement various energy systems on behalf of the headquarters and subsidiaries of the Group. The Power Division of the Group is responsible for the statistics of energy use and the analysis of electricity consumption of each electricity consumption unit. In addition, the Group further reduced energy consumption through multiple channels to reduce energy waste from the source, such as strengthening power-saving education, adopting customized lighting systems in office areas, refining energy consumption statistical analysis, and strengthening energy assessment systems. The specific action plan is implemented in each electricity consumption department and workshop, and the department formulates and implements specific energy-saving plans for each product and production process. The Group also carries out energy inspection and assessment within the Group, rewards the departments with remarkable energy-saving results, and punishes units and individuals in violation of electricity-saving management regulations. During the Reporting Period, the Group's water was mainly from municipal water supply and well water, and there was no difficulty in obtaining water sources.

Environmental Education and Training of Safety and Environment Department

On 5 December 2022, the SEP Department carried out environmental protection education and training for employees to improve their environmental awareness by introducing the Company's environmental protection policies, basic knowledge of environmental protection, ISO14001 environmental protection system, how to save resources and how to dispose of waste.

Water Conservation	Electricity Saving
➢ Check water pipeline facilities regularly to identify and deal with water supply pipelines and water leakage from taps in a timely manner ➢ Upgrade equipment to water-saving equipment, such as installing sensor flushing toilets and sensor faucets to avoid water wastage ➢ Carry out water-saving education and training for employees to enhance their awareness of water conservation ➢ Statistics of water consumption of each department, and assess the part with large water consumption, and install water meters when necessary to control water consumption	➢ Statistics of electricity consumption of each subsidiary, reasonable arrangement of production time, and encourage steelmaking during the evening period ➢ Turn off production equipment when not in use to avoid power loss ➢ Install lamps with appropriate power to meet the lighting needs of different areas ➢ Upgrade lamps to energy-saving lamps to reduce energy consumption ➢ Avoid unnecessary lighting, and enhance inspection of lighting by night shift staff ➢ Carry out power-saving education and training for employees to enhance their awareness of power-saving ➢ Encourage employees to turn off idle computers, air conditioners, lamps and other electrical equipment

Since 2017, the Group has purchased solar photovoltaic electricity from qualified suppliers by way of contractual energy management to reduce the indirect environmental impact brought by the Group's electricity consumption. During the Reporting Period, the Group's solar energy consumption was 5,860,394.8 kWh. In order to improve water efficiency, the two subsidiaries of the Group, Jiangsu Tiangong Technology Company Limited and Jurong Tiangong New Material Technology Company Limited have set a target of not exceeding 6,000 tons of monthly water consumption (excluding water consumption for projects under construction or trial production) in 2022. During the Reporting Period, the two aforementioned subsidiaries of the Group's actual average monthly water consumption was 5,790 tons, which was 210 tons less than the target water consumption.

Efficiency of Raw Material Consumption

The Group's main production raw materials of the die steel include steel, alloy, scrap iron and steel grinding swarf. In order to save resources and improve the utilization efficiency of raw materials, we recycle and reuse steel grinding cuttings in the production process. During the Reporting Period, the Group recycled and reused 56,493 tons of steel grinding swarf. In addition, the Group actively adopts the electric arc furnace short-process steelmaking process, i.e., alloy and scrap steel as the main raw material, which will be loaded into an electric furnace after mixing according to the ratios, and the steel scrap will be smelted with the heat generated from the electric arc between the graphite electrodes and the scrap steel, and qualified steel water will be obtained through the degassing process. The short-process steel-making process is simpler and cleaner, which can produce crude steel in one step, save energy in the production process, and reduce the emissions of pollutants and GHGs. Therefore, it can improve the efficiency of the use of raw materials, thereby maximizing the efficiency of resource utilization.

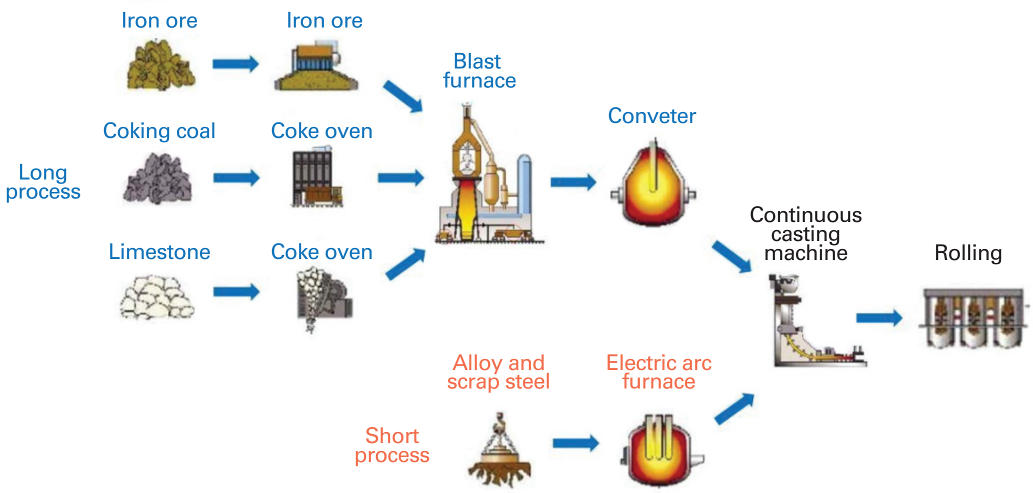


Diagram of Short and Long Process Comparison of Steel Making
Source: GF Securities-Special Research | Iron & Steel (March 6, 2018)

4.4 Response to Climate Change

In the face of frequent extreme weather around the world, governments of various countries have set goals and corresponding action plans to reduce the impact of climate change on the environment. In order to maintain the long-term development of the enterprise, the Group has carried out climate risk response work to help us identify and manage climate change-related opportunities and risks. With reference to the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), the Group conducted an ESG risk assessment. The assessment results show that the Group's "climate change and extreme weather risks" and "GHG emissions and management risks" are still at the "low" risk level for now. For the Group, the physical risks of "climate change and extreme weather risks" such as extreme weather such as high temperature and strong rainstorm may pose threats to our factory facilities, which may lead to prolonged production period and increase in costs. However, the plant has experience and plans to deal with such extreme weather conditions, and therefore this risk does not pose a material threat to the Group.

Nevertheless, in order to actively assume the responsibility for environmental protection, the Group urges all subsidiaries to formulate relevant emergency plans and systems based on their circumstances in response to environmental emergencies such as heavy pollution weather, and at the same time clarifies the responsibilities of each organization to ensure the standardization and scientific emergency treatment when environmental emergencies such as heavy pollution weather occur. At the same time, each subsidiary of the Group also signed the *Commitment Letter on Emergency Emission Reduction for Heavy Pollution Weather* and *Commitment Letter on Air Pollution Prevention and Control* to ensure that targeted measures will be taken in the event of a serious pollution weather event.

The Board is aware of the climate risks that the Group may face and regularly provides the Directors with the latest operational feedback and industry best practices to timely adjust and promote the Group's climate change response strategy. In order to prevent the potential adverse impact of climate change as early as possible, the Group has actively formulated and implemented the *Carbon Emissions Management System* and carried out GHG emission reduction projects to improve energy efficiency, develop and utilize new energy and renewable energy and other projects that can reduce six GHG emissions, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6). The system also clearly stipulates that the energy management leading group is the management and implementation department of the Group's GHG emission reduction, responsible for the statistical management of the emission reduction generated by the Group's GHG emission reduction projects, conducting transactions or disposals in accordance with national policies and international rules, and inspecting and evaluating the work of the Group's GHG emission reduction projects. In order to ensure that the Group operates in compliance with the GHG emission reduction rules, the system stipulates that carbon emission inspection and assessment shall be included in the Group's performance assessment system. The Group's energy management leading group conducts inspection on the main units and project assistance units. After the inspection results are calculated and scored, the results will be reported to the central resource assessment semi-annually to improve execution and ensure effectiveness.

5 Tiangong Quality, Excellent Enterprise

Quality is the cornerstone of corporate development. Product quality is directly related to the trust and loyalty of customers, and is also the foundation for an enterprise to maintain its market position. The Group adheres to the spirit of craftsmanship and carefully builds steel to ensure that product quality meets customer needs and market standards, so as to improve customer satisfaction, reduce costs and improve production efficiency, and lead the industry towards high-quality and sustainable development. During the Reporting Period, the Group complied with and abided by the *Work Safety Law of the People's Republic of China*, the *Product Quality Law of the People's Republic of China*, the *Advertising Law of the People's Republic of China*, the *Regulation on the Implementation of the Trademark Law of the People's Republic of China*, the *Chemicals Convention*, the *Law of the People's Republic of China on the Protection of Consumer Rights and Interests* and other laws and regulations that have a significant impact on the Group relating to product responsibility.

With excellent product quality and good corporate image, the Group was awarded the "2022 Global Influential Brand in the Steel Industry" during the Reporting Period. During the Reporting Period, the Group was awarded the "Jinshan Award" in the Manufacturing Industry in Zhenjiang for 2021 and the "Global Influential Brand in the Steel Industry in 2022" in China's steel industry, which is in the process of transforming from "China's steel products" to "China's steel brand". The "Tiangong Powder Metallurgy Industrial Internet Platform", which the Group participated in, was selected as a benchmark case for digital transformation of enterprises in the Yangtze River Delta in 2022. In addition, the Group also won the "7th Golden Hong Kong Stocks — Most Valuable Industrial Manufacturing Company Award" and "Fuhua Investment Relationship Awards 2021".

The Company was awarded the "Jinshan Award" in Manufacturing Industry 2021

In February 2022, at the Zhenjiang City Industrial Strong Market and Business Environment Optimization Conference, Tiangong International was awarded 11 awards, including the 2021 Zhenjiang Manufacturing "Jinshan Award", the "Mengxi Award" for technological innovation and the "Ganlu Award" for business environment optimization.

After comprehensive assessment, Tiangong International was awarded the "Gold Mountains Award" in the manufacturing industry in 2021. This is the third time that Tiangong International won the Zhenjiang Manufacturing "Jinshan Award" after 2019 and 2020.

2022钢铁行业全球影响力品牌

中国宝武钢铁集团有限公司
河钢集团有限公司
中信泰富特钢集团股份有限公司
鞍钢集团有限公司
首钢集团有限公司
江苏沙钢集团有限公司
上海德龙钢铁集团有限公司
中国冶金科工集团有限公司
北京建龙重工集团有限公司
南京钢铁股份有限公司
湖南钢铁集团
天工国际有限公司
常熟市龙腾特种钢铁有限公司
青山控股集团有限公司
敬业集团
新兴铸管股份有限公司

(排名不分先后)

天工国际

The Company was awarded the "2022 Global Influential Brand in the Steel Industry"

In May 2022, following the award of "Excellent Steel Enterprise Brand in China" and "Excellent Special Steel Brand in China" in 2021, the Group was listed as a "Global Influential Brand in the Steel Industry" in 2022, reflecting the Group's global influence in the field of tool and die steel.

With this award, the Group remains true to its original aspiration, takes the development of new materials and continuous improvement of material performance as its responsibility, and continuously supports the development of the manufacturing industry by breaking through the "bottleneck" of technology and products.

5.1 Quality control

The Group is fundamental to providing customers with high-quality products and services, and always pursues higher product quality and service quality in order to gain wider public recognition and a better corporate image. To ensure product quality, the Group implements a quality management system covering the entire product life cycle. In accordance with GB/T 19001-2016/ISO9001: 2015 Quality Management System — Requirements, we have formulated a strict product quality control system and process. In addition, we also carry out quality management of products in accordance with GB/T 19022-2003/ISO10012: 2003 *Measurement Management Systems — Requirements for Measurement Processes and Measuring Equipment* to ensure that the product quality meets the standards.

A number of subsidiaries of the Group have obtained GB/T 19001-2016/ISO9001: 2015 quality management system certifications, including but not limited to Tiangong Aihe Company Limited, Jiangsu Tiangong Precision Tools Company Limited, Jiangsu Tiangong Tools New Materials Company Limited, Jiangsu Tiangong Technology Company Limited, etc.

The Group adheres to the principle that product performance, quality and safety are of paramount importance, and has formulated various quality assurance and inspection procedures in all aspects of the production process, striving to provide customers with the highest quality and safe products and services.

The Group has formulated and implemented a series of process operating procedures such as the *Management Procedure for New Product Development*, the *Control Procedure for Self-Made Unqualified Product* and the *Enterprise Measurement Management Regulation* as well as product quality control manuals for various products, in order to conduct meticulous quality control in every aspect from raw material inspection to product export. Through sampling and testing of raw materials, physical and chemical testing of semi-finished products at each stage of production, special quality testing of finished products and other means, we ensure that the product quality meets the standards and avoid the harm of products to users' health and safety. Before the final delivery, we will affix product labels to products that have passed quality tests. Only after confirming that the content of product labels is correct according to internal procedures and obtaining product quality warranties, the relevant products can be officially launched to the market.

If there are any quality issues with the products sold, customers can contact the Group's Sales Department for handling. The Sales Department will properly handle the solutions to customers 'satisfaction in accordance with the provisions and procedures of the *Control Procedure for Self-Made Unqualified Product*. The Group shall adopt appropriate measures in a timely manner to solve the problems of unqualified products.

With a sound production management system and excellent product quality, during the Reporting Period, Jiangsu Tiangong Tools New Materials Company Limited, a subsidiary of the Group, was selected as an innovative leader cultivation action; and Jiangsu Tiangong Technology Company Limited was selected as a provincial level "Specialized and New" enterprise.

5.2 Customer rights

The Group is committed to improving the quality of the services and products provided in order to form a long-term, stable and continuous cooperative relationship with its customers. The Group always places customers' opinions and feedback as an important priority and maintains active and effective communication with customers during the sales process. In terms of product services, the Group has set up an anti-counterfeiting inquiry system for products. The Customers can verify the authenticity of products through QR code authentication, digital anti-counterfeiting inquiry and product serial number inquiry to ensure that the products purchased are authentic. The Group always attaches great importance to the protection of customer privacy and strictly stores customer information to ensure that it is not leaked. The Group sets access permission for customers sensitive information and regulates the types of confidential management that each department should be responsible for. Only employees of the Sales Department and the Finance Department can access customers' personal information. In addition, the Group requires employees to handle customer information with due care to prevent leakage of customer information. In case of any human error that causes leakage of customer privacy or improper handling of customer personal information, the Group will impose disciplinary penalties on relevant personnel in accordance with the established procedures to ensure that employees comply with relevant customer privacy confidentiality regulations and improve confidentiality management. The Group always takes integrity and fairness as the standard of dealings and strictly prohibits any illegal acts of fraudulent marketing. The Group's promotional materials and contents on the website are prepared and compiled in strict accordance with the requirements of the *Advertising Law of the People's Republic of China*. The Group adopts a multi-level review method to review the accuracy of the content of the promotional materials. The Group's promotional materials must be reviewed before external use to ensure that the products or technologies provided on the promotional materials do not involve any infringement, and the contents or descriptions used are following the requirements of the Advertising Law.

Customer opinions are valuable references for the Group to continuously improve product quality. Therefore, the Group conducts customer satisfaction surveys every year and invites key customers to provide valuable opinions. The 2022 customer satisfaction survey report shows that the overall customers are very satisfied with the Group's product quality and services. In 2022, the average rate of customer satisfaction reached 91.8%.

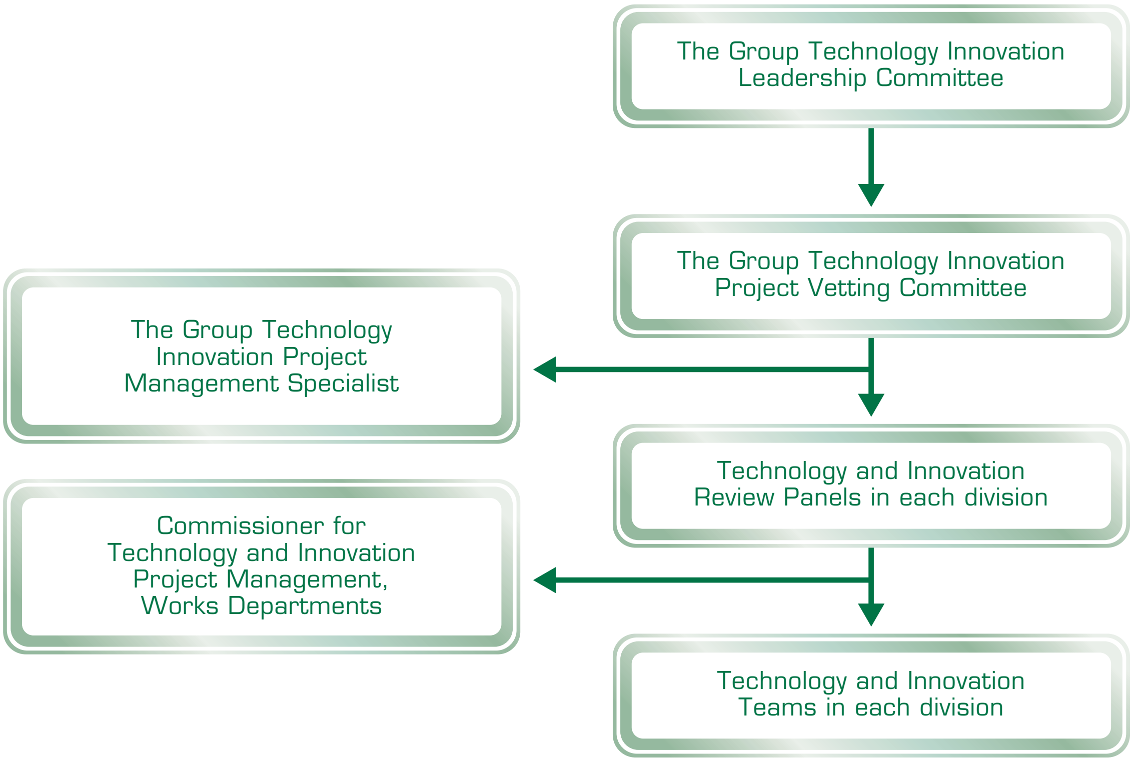
The Group has formulated the *After-sales Service Management System* to standardize the specific process of handling customer complaints and set up a customer service platform system during the Reporting Period to set up a comprehensive and smooth customer communication channel. The Group's process for handling customer complaints is as follows: a process is created after receiving a complaint by the sales staff, and the technical customer service staff will pass the problem to the person in charge of the Technical Department. The inspection supervisor will confirm the problem and report it to the person in charge of the Technical Department. The quality inspection will be conducted to confirm the responsible department and the handling methods. The content will be reviewed by the two-level technical leader, and the sales leader will confirm the reply content again, and the constructor and customer will confirm until the customer complaint is properly handled, and the information is filed.

In addition, our sales team also conducts regular meetings with our customers to understand their opinions and suggestions on our Group's products and services. During the Reporting Period, the Group received a total of 57 customer complaints and the relevant complaints have been properly handled.

5.3 Leading Innovation

Technological innovation

Scientific and technological innovation is the primary productivity and the "key point" to lead the high-quality and sustainable development of an enterprise. It is the driving force and the "lifeline" to drive the comprehensive development of an enterprise, while creating a full participation, full protection, motivation and guidance of all staff to enhance the awareness of innovation, cultivate innovative thinking, stimulate creative thinking, and build a strong atmosphere of everyone eager to innovate, everyone strive to innovate. Based on its previous experience in technological innovation management, the Group has formulated the *Tiangong International Technology Innovation Management Implementation Measures* to establish a system comprising rational suggestions, QCC (quality control circle, i.e. a group formed by the automatic and voluntary quality management activities of personnel in the same work site or work-related areas), the grading of technological or management innovation projects, patents and papers, and the reward system. The Group has also set up a comprehensive management committee for scientific and technological innovation to break the awareness of scientific and technological innovation in the mind of all cadres and employees, change the awareness of scientific and technological innovation of all employees, break the situation that scientific and technological innovation is forced to be implemented under the previous requirements, form a country of self-initiative and innovation from the bottom up, break the previous mode of no planned innovation, no innovation tracking, and no achievement sharing, and realize the systematic management mold of bottom-up hierarchical management, hierarchical review, and hierarchical reward. The Group has set up a management structure with all cadres and employees as the main body of innovation and the work department as the front-line management team for scientific and technological innovation projects.



Since the establishment of China's first industrial die steel powder metallurgy production line in 2019, the Group has continued its research and development in the field of powder metallurgy to overcome the technical difficulties in the field and break the international monopoly of the key technology bottleneck of powder metallurgy. The Group has become the only enterprise in China that masters the large-scale production technology of industrial die steel powder metallurgy. With advanced powder production equipment and powder production technology, the types of powder materials have been developed up to 35, including high speed steel powder, die steel powder, stainless steel powder, etc. At the same time, the Group actively cooperates with the Central Iron and Steel Research Institute, Jiangsu University, Shandong University, Northeastern University, and printing equipment manufacturers to provide corresponding metal powder materials for different printing technologies. During the Reporting Period, the Powder Metallurgy Research Institute applied for a key research and development project in Jiangsu Province for powder materials used in the production of additives based on binder injection technology. The project is based on binder injection technology and is mainly engaged in the research of powder high speed steel precision molding technology. On 12 April 2022, the project has passed the Zhenjiang City Review Committee and officially entered the provincial assessment stage. In the future, the Group will continue to take the responsibility of developing new materials and continuously improving the performance of materials to help improve the overall manufacturing level and the extensive promotion of metal 3D printing technology.

At the same time, the Group also attaches great importance to the cultivation of innovative talents. During the Reporting Period, the Group encouraged employees to innovate through various means. On 27 December 2022, the Group held the 2022 Science and Technology Innovation Work Summary and Commendation Conference and awarded certificates and bonuses to innovative individuals and teams who have achieved outstanding results in 2022 Science and Technology Innovation.

Tiangong International 2022 Science and Technology Innovation Summary Commendation Conference

Capture downstream market dynamics

In order to capture the demand of customers in the downstream market and accelerate the development of the integrated die casting market for mold materials, the Group entered into the Strategic Cooperation Agreement with a total of 13 downstream mold and auto parts enterprises, including the casting mold factory of FAW Foundry Co., Ltd., Guangzhou Die and MOULD Manufacturing Co., Ltd., Ningbo Beilun Sciveda Machinery CO., Ltd., Ningbo Heli Technology Co., Ltd., Guangdong Hongtu Technology (holdings) Co., Ltd., and Dalian Yaming AUTOMOTIVE PARTS Co., Ltd., to jointly open a new chapter in the development of large mold materials and integrated mold industry through the mode of mutual cooperation in materials, technology and application.

Intellectual Property Protection

The Group strictly abides by the *Patent Law of the People's Republic of China* and the *Copyright Law of the People's Republic of China*. In order to further cultivate a corporate innovation culture and protect internal Research & Development achievements, the Group has formulated the *Intellectual Property Management System* to regulate intellectual property management. The system clearly regulates and defines the categories of the Group's intellectual property rights, the division of responsibilities for intellectual property management, the reward mechanism for technological innovation, and the signing process of confidentiality agreements. The Intellectual Property Management Department of the Group is responsible for daily intellectual property management. Its main responsibilities include formulating various intellectual property management regulations, establishing and managing intellectual property files, applying for patents on behalf of the Group, and handling intellectual property disputes and litigation matters of the Group. In order to effectively protect the Group's technical and business confidential information, the Group enters into confidentiality agreements with employees and partners to clarify the terms related to the protection of the Group's intellectual property rights. If any infringement of the Group's intellectual property rights is found, we will hold the relevant personnel accountable according to the procedures and resolve it through legal means if necessary. During the Reporting Period, the Group holds 10 new patents.

6 Safety first and guarantee the whole production process

The Group has always implemented the work safety policy of "Safety First and Prevention-oriented", placing the health and personal safety of employees as the highest priority, and is committed to creating a working and living environment that can ensure the safety of employees. The Group strictly abides by the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, the *Administrative Measures for the Diagnosis and Identification of Occupational Diseases*, the *Work Safety Law of the People's Republic of China* and other laws and regulations that have a significant impact on the Group relating to the prevention of occupational hazards. In order to achieve the goal of zero casualties, the Group has established a sound production safety management system and formulated the *Occupational Health and Safety Management System*. This system implements the principle of "Production management must be managed with safety" in the organization and system, so that leaders at all levels, functional departments, production departments and employees can clearly define their responsibilities for occupational hazard prevention and control, so that they can perform their duties at all levels, perform their responsibilities, effectively carrying out the prevention and control measure for occupational hazards, and promote the sustainable development of production.

Several subsidiaries of the Group have obtained GB/T 45001-2020/ISO 45001: 2018 Occupational Health and Safety Management System certification, including but not limited to Tiangong Aihe Special Steel Company Limited, Jiangsu Tiangong Precision Tools Company Limited, Jiangsu Tiangong Tools New Materials Company Limited, etc.

6.1 Safety Production Responsibility

In order to ensure the effective implementation of the Group's production safety policies, the Group has formulated and implemented the *Liability System for Safety Production*, which clearly defines the production safety responsibilities of leaders at all levels, functional departments, engineering and technical personnel and operational personnel. Under the leadership of the general manager of the Company, the head of the Safety Department is responsible for the specific management of the Group's production safety, organizing and assisting relevant departments in formulating or revising the production safety system and safety technical operation procedures, and providing business technical guidance to the safety officers of various departments. The system requires employees to organize education and training activities on production safety, and guides employees to use personal protective equipment, machinery and equipment and tools correctly, so as to ensure that employees fully understand the production safety system and operating procedures, and at the same time assist relevant departments in proposing measures to prevent accidents and urge them to achieve them on schedule; organize relevant departments to study and implement measures to prevent occupational poisoning and occupational diseases; supervise relevant departments to properly carry out work-life balance and protection of female workers.

6.2 Safety Production Training

The Group has formulated and implemented the *Safety Training System* to enable all employees to receive comprehensive safety training, familiarize themselves with all safety management systems, and sign the *Letter of Undertaking of Safety Production for Employee* before officially performing their duties. The Group's safety training is mainly divided into three levels, the details of which are as follows:

Training level	Training Content
Level 1 training	Production safety laws and regulations, the Group's production safety rules and regulations, basic safety knowledge
Level 2 training	Production characteristics of workshops, machinery and equipment conditions, accident prevention measures, various rules and regulations
Level 3 training	Safety technical operating procedures for work positions, production characteristics of work positions, performance of machinery and equipment, protection facilities for safety production, use of tools and personal protective equipment, accident case studies

During the Reporting Period, the Group organized a number of safety production-related training activities, including but not limited to the following:

From 6 to 7 September 2022, in order to promote the construction of the Group's management system, build a safety firewall, improve the management level and safety awareness in trade safety and supply chain, enhance the emergency safety capabilities of all employees, and promote the safety development of the Group. The Group carried out special training on "Trade Safety and Supply Chain Safety of Tiangong Tools" and "Emergency Safety of Tiangong Tools" in batches at the 3rd floor notification hall of the administrative center. The training was conducted by the head of the SEP Department of the Group. More than 900 managers and front-line employees of Jiangsu Tiangong Tools New Material Company Limited participated in the training.

6.3 Inspection and Review of Safety Production

Standardization of production safety refers to the establishment of a production safety responsibility system, the formulation of safety management systems and operating procedures, the investigation and treatment of hidden dangers, the monitoring of major sources of danger, the establishment of a prevention mechanism, the standardization of production behavior and continuous improvement, which are important ways for enterprises to implement the main responsibility of production safety. The Group has formulated the *Safety Inspection System* to ensure safe production. The inspection work is mainly divided into system inspection and hidden danger inspection. In order to comply with the *Measures for the Grading of Enterprise Work Safety Standardization Construction* issued by the Ministry of Emergency Management of the People's Republic of China. Tiangong Aihe Special Steel Company Limited, a subsidiary of the Group, has established work safety standardization work, which has been actively assessed and affirmed by experts from the government evaluation group, and notified Tiangong Aihe Special Steel Company Limited to pass the second level of work safety standardization review.

The Group conducts a series of safety production inspection activities at all levels every year, including quarterly company-level safety production inspection, monthly safety inspection meetings of each workshop, daily safety production briefing, and a summary of each team. In particular, the monthly safety inspection of the workshops will conduct an in-depth review of the safety performance of each workshop and report to the higher level; each team will conduct a five-minute safety production briefing before commencing work every day, and a three-minute safety inspection summary three minutes before leaving work to ensure that employees always maintain their awareness of safety production.

In addition, the Group holds quarterly departmental meetings to review and review the work of production safety, labor protection and safety publicity and education during the quarter, so as to continuously improve work safety management. At the same time, the Group has also formulated the *Reporting System of Safety Work*, requiring all departments to submit a written report to the Group every half year to report their safety work responsibilities and accident control. The written report shall include the following:

- Implementation of occupational safety management, work-related casualties, fire hazards, traffic accidents, new occupational diseases, management of significant potential risks
- Innovative ideas on occupational safety management and practice
- Safety work plan on the next half year

6.4 Emergency Response

The formulation of *Emergency Response Plan* is a work involving all employees. Through the formulation and drilling of the plan, better cooperation and communication among various departments can be achieved, which is conducive to improving the emergency response capability within the enterprise and making the enterprise more orderly and efficient in case of emergencies. The Group has formulated the *Emergency Response Plan* for emergency response and rescue of fire and other emergencies. The plan focuses on major types of safety accidents identified by the Group, such as fire, electric shock, explosion, food poisoning, heat stroke, vehicle accidents, falling from height, mechanical injury accidents, etc., which helps reduce the possibility of accidents and improve the safety protection of employees. At the critical moment, the emergency plan can be quickly activated to minimize losses. In order to ensure safe production and respond to emergencies, the Group has established a production safety leading group and an emergency response team. The safety production leading group is responsible for directing emergency response work to ensure timely response in the event of an accident and minimize casualties and property losses. In addition, the Group has also set up a special firefighting team, emergency response team, emergency evacuation team, external liaison team and traffic support team to ensure efficient handling of emergency safety accidents and reduce the impact of accidents. In order to improve the emergency response capability, annual emergency knowledge and skills training is organized for all members of the safety production leading group and emergency response group every year. The training includes emergency procedures, first aid methods, use of fire extinguishers, etc. These measures together ensure the effective organization and efficient execution of the Group's Emergency Response work.

The Group reviews the *Emergency Response Plan* every year and revises it when necessary, according to the actual situation of the production workshop to ensure that the rescue plan is effective and feasible. In particular, the Group also organizes emergency drills every year to ensure the rescue team's practical experience and rescue ability and revises the Emergency Response Plan according to the problems found during the drills.

In July 2022, the Group carried out emergency drills for heat stroke. Heat stroke is a common accident during construction in high-temperature weather. From the ultimate damage of the heatstroke, the timely and proper treatment of heatstroke victims can greatly increase their chances of survival. The purpose of preparing the emergency plan for heat stroke is to put the greatest effort to rescue the victims of heat stroke from death and to minimize the harm to people who suffered an accident. Through the drills, we can reduce the occurrence and spread of accidents, carry out effective rescue, reduce losses and quickly return to normal.

In December 2022, the Group carried out fire emergency evacuation drills to implement the Group's fire accident prevention measures, eliminate fire safety hazards, minimize losses, ensure the safety of employees and the Company's properties, and enhance employees' fire safety awareness and self-rescue skills.

7 Equal employment and building an excellent team

The Group believes that the success of corporate development depends on the efforts and contributions of its employees. To this end, we adhere to the "people-oriented" employment management principle and are committed to attracting and retaining outstanding talents and building an excellent talent team with sincerity.

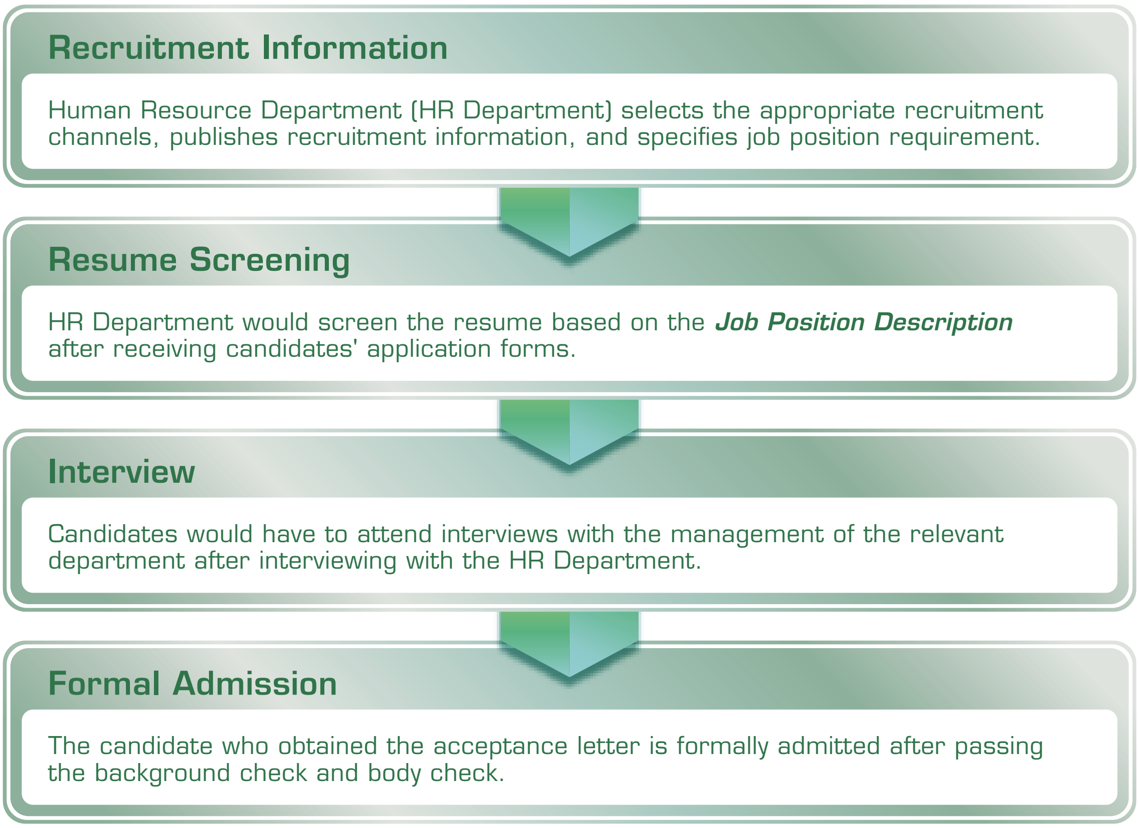
7.1 Employment Management

The Group has established a sound human resources management system to specify the procedures for recruitment, promotion, and dismissal. The Group has formulated and implemented the *Personnel Recruitment Procedures* to regulate the conditions of recruitment and formulate corresponding procedures to ensure the fairness, impartiality, and openness of the recruitment process. After an employee joins the Company, he/she will sign an employment contract with the employee in accordance with the law, covering matters such as employee remuneration, benefits, health and safety, confidentiality obligations and grounds for termination. The Group has also formulated regulations on the resignation and dismissal of employees to regulate the notice period of resignation and dismissal and salary compensation, to fully protect the rights and interests of employees and the Company.

Diversity and equality

The Group adheres to the principle of "Openness, Fairness, Competition, Competitive Selection and Voluntariness" and implements an employment policy of equality, diversity, and inclusion. The employees' recruitment, dismissal, remuneration, promotion, holiday policy, training, and other aspects are assessed based on their personal ability and performance. Employment discrimination in race, nationality, age, and gender is strictly prohibited. Equal employment opportunities are provided to all candidates from different backgrounds, and the Group is committed to creating a diversified and inclusive working environment.

The specific recruitment process of the Group is as follows:



Legal Labor

The Group strictly complies with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Provisions on the Prohibition of Using Child Labor* and other applicable laws and regulations relating to employment and labor in the places where the Group's business operates to ensure legal employment and strictly prohibits the employment of persons under the age of 16. To prevent the employment of child labor, the Group has formulated the *Regulations on the Management of Child and Minor Workers* to verify the age of job applicants to avoid the use of child labor and to formulate remedial measures to be taken in case of misuse of child labor. All employees of the Group are required to provide valid identification documents as proof that they have met the legal age requirement before the commencement of their employment. If a minor is employed, the Group's employment relationship with him/her will be terminated immediately. During the Reporting Period, the Group did not use child labor. If child labor is found, we will terminate employment immediately and hold the relevant departments and personnel accountable. We will also investigate the relevant issues and identify loopholes, and review and improve our human resources management system to prevent the recurrence of similar situations. The Group strictly prohibits any form of forced labor, eliminates the use of bonded and imprisoned labor, and does not cooperate or deal with any entity or organization that uses imprisoned labor. In order to uphold law-abiding operation and ensure that the free rights and personalities of employees are not infringed upon, the Group has formulated the *Regulations on the Prevention of Involuntary Labor* to monitor and implement the prevention of involuntary labor. The scope of this policy is applicable to all employees of the Group, from the beginning of recruitment to the entire process of the employee's contact with the labor contract. During the recruitment, the Group introduces the basic information of the Company and the relevant policies and management regulations, especially the working hours and benefits, etc. to the candidates to ensure that they apply for employment voluntarily. The Group enters labor contracts with applicants in accordance with the *Labor Contract Law of the People's Republic of China*, and employees have the right to resign or terminate labor contracts at any time. Our labor contract provisions also stipulate that the working hours of employees shall not exceed eight hours a day, and the average working hours per week shall not exceed 40 hours. If overtime work is necessary, employees are required to apply to their superiors in advance. During the Reporting Period, the Group did not have any forced labor. The Group respects and protects human rights and has formulated the *Regulations on the Management of Child Labor* and the *Regulations on the Prevention of Involuntary Labor*, and added the *Regulations on the Management of Employment and Protection of Employees' Rights and the Regulations on the Management of Anti-Discrimination, Abuse and Harassment* in early 2023 to protect the Group's effective management and prevention of child labor, forced labor, discrimination and harassment in employment and to protect employees' rights such as freedom of association.

Dismissal

In order to protect the rights and interests of both employers and employees and avoid labor disputes caused by the termination of labor contracts, we have formulated the *Regulations on the Management of Employment Termination* to standardize the employee resignation procedures, standardize the notice period of resignation and dismissal and salary compensation, and fully protect the rights and interests of employees and the Company, including the specific procedures such as resignation application, resignation interview, work handover, project settlement and handling procedures. The details of resignation are also clearly stated in the labor contracts signed with employees to ensure that employees have full right to know the relevant regulations.

7.2 Remuneration and benefits

In order to attract, retain and motivate talents, the Group has established an attractive remuneration and welfare system. The Group has formulated and implemented internal remuneration management regulations such as the Regulations on the Administration of Remuneration for Administrative Positions, the Regulations on the Administration of Remuneration for Technical and Management Positions, and the Regulations on the Standard and Accounting Management of Subsidies for Academic Qualification and Title, to clarify the remuneration structure and salary adjustment standards for each position. Every year, the Group conducts an annual comprehensive assessment of employees, which includes three parts: self-assessment, departmental colleagues' and supervisor's assessment, and makes appropriate adjustments to employees' remuneration based on this.

The Group provides employees with a comprehensive welfare system. We contribute to various social insurances for our employees in accordance with national requirements, including basic pension insurance, basic medical insurance, maternity insurance, work-related injury insurance, unemployment insurance and housing provident fund. In addition, the Group has formulated and strictly implemented the *Regulations on Employee Leaves (2022)* to ensure that employees are entitled to statutory paid holidays and other statutory holidays, such as marriage leave, maternity leave and funeral leave. In addition to statutory benefits, we also provide employees with various types of benefits, including free working meals, free physical examination, additional insurance, holiday benefits, special bonus for employees' children to obtain admission to schools, reimbursement of Spring Festival travel expenses and travel benefits. These welfare measures allow employees to feel the care of the Company, enhance their sense of belonging and satisfaction, and improve the cohesion of the Company.

Since 2020, the Group has implemented the policy of "special awards to employee's children as an encouragement to their admissions to renowned universities" and granted special awards ranging from RMB20,000 to RMB80,000 to children of employees who have been admitted to the top 50 international schools and the top 20 domestic schools.

Special award for children of Tiangong International employees to admissions to renowned universities

In August 2022, a ceremony was held at the administrative office building of the headquarters of the Company, at which the Company's "Special Reward for Employees' Children's Examination" was awarded, among which, the son of one of our workshop quality inspectors was awarded a special reward by the Company.

7.3 Hearts with Tiangong

As an enterprise focusing on employee benefits, the Group actively carries out various cultural and sports activities to enrich employees' spare time life and enhance their sense of happiness and belonging. In order to promote a healthy lifestyle, the Group holds a staff sports meeting every year. Employees can participate in various sports activities, including basketball, football, badminton, and table tennis. Employees who participate in these activities not only can exercise their bodies but also enhance the team spirit and collaboration ability. The Group focuses on creating a good working atmosphere and team culture, and encourages employees to actively communicate with each other, support and help each other. The Group regularly organizes various cultural and sports activities to enhance the connection and interaction among employees. Under the influence of this atmosphere, employees are more willing to participate in various cultural and sports activities and feel the care and support of the Group.

On 13 April 2022, the Company convened the second meeting of the third session of the employee representative meeting and achieved a successful result. The annual Workers' Congress of the Company is for the employees to understand the overall development of the Group and pay attention to the performance of the economy and people's livelihood. It is also a new journey for the Company's employees to build consensus and confidence, which has a profound impact on the Company's economic development and the improvement of employees' happiness.

"3rd Staff Congress of The Group"

In this warm and special Father's Day, the Youth League Committee of Tiangong International organized the oil painting activity of "I am grateful to the Father's Day, I have "painted" to you". A total of 36 employees from various positions of the Group participated in the activity. Parents took their children to make a Father's Day gift with their own hands.

"Tiangong International Youth League & Father's Day Event"

In October 2022, the Group held the "Tiangong International 11th Staff Sports Day", which further stimulated the enthusiasm of most cadres through the launch of the staff sports meeting, fully demonstrated the excellent tradition and team spirit of Tiangong people who are courageous, united, and cooperative, courageous, healthy and progressive, and enhanced the cohesion, centripetal force and combat power of employees. Competition and cooperation in the sports field have promoted the team spirit of all Tiangong staffs and encouraged the morale of all cadres.

"The 11th Staff Sports Day of Tiangong International"

7.4 Promotion and Development

We regard employees as the most valuable asset of the Group, tailor-made career development plans for young employees, and motivate young people to continuously improve their comprehensive quality and healthy growth with a clear career development path. At the same time, we also ensure fair promotion opportunities and create an equal, positive, and upward working environment.

Promotion System

In terms of development and promotion, the Group has formulated and implemented the *Promotion Management Regulations* internally to further standardize the employee promotion management procedures. Through the *Promotion Management Regulations*, a diversified career development channel has been established, a promotion mechanism covering all positions has been implemented, and the reform of the talent development mechanism has been continuously deepened to help enterprises realize the transformation of talent reserves, and help employees better realize their personal values. The Group has been striving to meet the personal career development planning and development needs of employees in different departments and fields, as well as attracting and motivating qualified talents to stay in the Group and create a better future. The Group has also formulated the *Administrative Measures for Comprehensively Improving the Yield of Materials* to clarify the assessment and accounting, the implementation standards of the yield of materials and the implementation of responsibilities for improving the yield of materials and the wages of employees and commenced full trial operation during the Reporting Period. In order to promote the improvement of yield rate, with reference to the overall plan and measures of "salary reform for front-line production workers", the Company has completely abolished the previous salary distribution model of single salary of employees by quantity, and improved employees' sense of responsibility for quality assurance. The Group has specifically issued the *Administrative Measures on Comprehensively Improving the Yield of Raw Materials*, which clarified the relevant implementation rules.

Exploring Potential

The Group always insists on closely linking the personal development of employees with the business needs and strives to build an excellent work team. In order to improve employees' business skills and identify potential talents, the Group attaches great importance to employee training and is committed to improving employees' base and professional knowledge and skills by providing different types of employee vocational training, so as to broaden employees' career development path and help them realize their self-worth.

The Group attaches great importance to the training activities for new employees. In order to enable new employees to get familiar with the Group's culture and system as soon as possible and be competent for their new positions, the Group has formulated the *Training Management Procedures* to regulate the management of new employees' induction training. New employees must receive training at three levels, namely company, department, and team. Through the training, the new employees will have basic knowledge and skills on the Group's profile, corporate culture, rules and regulations, social responsibility, fire safety, occupational health, etc., as well as the basic knowledge and skills of their positions. The induction training for new employees is mainly divided into two phases. The Human Resources Department is responsible for organizing the first phase of the training, which includes the history and current status of corporate development, corporate culture, rules and regulations, team cooperation, corporate organization and department responsibilities, etc.; the second phase of training is organized by senior employees from various departments, and special training is provided to new employees according to the specific job nature, such as tool process and application, quality management knowledge, safety operation procedures, etc. After the training, we will also conduct training assessments for employees to ensure that they fully understand and master the training content.

In addition, the Group adopts a "one-on-one" apprenticeship system, focusing on cultivating talents in technical positions. Under this system, experienced employees (i.e., masters) will pass on various work experiences and methods to new employees (i.e., apprentices) by way of passing on, helping and leading. To this end, we have formulated and implemented the *Interim Measures for "Master-Apprentice" Programme*, which regulates the specific rules and defines the qualifications of mentors, the way in which apprenticeship relations are established, and the responsibilities of both mentors and apprentices. The Group has also set up an incentive mechanism to reward masters and to reward new employees with outstanding performance, so as to motivate employees to actively participate in apprenticeship assistance activities.

During the Reporting Period, various departments of the Group organized different types of special training, including but not limited to the following:

2022 Training Plan	
Course Name	**Curriculum Outline**
Corporate culture	Corporate development history and culture
Professional knowledge	Job-related knowledge
Business etiquette	Business etiquette
Equipment maintenance and repair	Master the basic knowledge of daily maintenance and repair of equipment to ensure the operation of equipment
Management capability enhancement	Learning management ability to improve and enhance management awareness
Safety knowledge training	Eliminating safety hazards and ensuring safe production
Accounting practice	How to be an excellent financial officer
Information security	Establish a correct understanding of information security and understand the threats and risks of information security in the work; Cultivate information security awareness and good habits
Customs laws and regulations	Customs business knowledge
Customs laws and regulations	Customs laws and regulations
Safety training	Trade safety and supply chain safety training
Emergency training	Emergency training and handling measures

"Trade Safety and Supply Chain Safety Training"

In September 2022, the Group held a special training on trade safety and supply chain safety, so that employees of the Group can understand the trade safety module of the supply chain and ensure the safety of goods delivery.

8 Standardized operation and responsible entity

8.1 Supplier Management

The Group focuses on the environmental and social risk management of the supply chain to ensure the sustainable development of the supply chain. The Group has formulated internal policies such as the *Regulations Governing the Procurement of Supplies and Price Accounting*, the *Regulations on the Tender Management, the Regulations on Procurement Management and Implementation (Trial)*, and the *Supplier Management Regulations* to standardize the procurement process, ensure the fairness, justice and transparency of bidding and procurement, and strengthen the supervision and management of procurement to ensure the institutionalization and standardization of procurement. We strictly implement internal policies related to supply chain management, pay attention to the integrity and ethical standards of procurement, and do not favor a supplier or individual in the procurement process, so as to ensure the fairness of procurement.

The Group mainly purchases raw materials such as metals and equipment. When engaging suppliers, the supply department of the Group will select at least three suppliers from the list of qualified suppliers to participate in the selection and invite relevant technical departments such as the user department, the technology innovation department, and the equipment department to review and express opinions on the suppliers participating in the selection. After reaching a consensus on the selection of suppliers, the relevant departments shall sign and confirm on the *Tender Summary Form* and submit it to the general manager for review. This process ensures that the Group selects the most suitable supplier, while multiple departments assess and confirm the quality and technology of the supplier. Through this process, the Group can avoid possible risks and quality problems in the procurement process, ensure that the quality and performance of the purchased materials and equipment meet the requirements, and improve the Group's procurement efficiency and quality.

In order to further reduce the social and environmental risks of the supply chain, the Group has established a qualified supplier mechanism. The Group's supply department regularly maintains a list of qualified suppliers according to the types of materials to ensure that there are at least three qualified suppliers for each type of material and ensures that the cooperative suppliers for procurement business must be selected from the list of qualified suppliers. The Supply Department also actively searches for potential high-quality suppliers, and at the same time conducts reviews and inspections on qualified suppliers to ensure that the list of qualified suppliers is updated at least once a year or every six months to continuously monitor the quality of supply.

The Group reviews the suppliers' products, services, environmental and social performance annually, including their product quality, supply speed, after-sales service, management level, whether they have formulated environmental and social related management measures, whether they have records of major violations in environmental and social aspects, etc. In order to ensure the quality and stability of raw material supply, the Group also holds regular meetings with suppliers and arranges on-site audits according to actual needs to practically assess suppliers' environmental and social responsibility performance. If suppliers are found to be in violation of laws such as hiring child labor or forced labor, the Group will immediately terminate the partnership with them. We also require suppliers to sign the *Integrity Policy Confirmation Letter*, and only after the suppliers confirm and ensure the implementation of relevant integrity policies can they formally sign a procurement contract. In addition, in order to advocate green and low-carbon procurement, the Group gives priority to hiring local suppliers to reduce pollutant emissions during the transportation of the supply chain.

8.2 Anti-corruption

The Group attaches great importance to business compliance, continuously strengthens anti-corruption work, and adopts a zero-tolerance attitude towards any form of corruption, bribery, extortion, money laundering and fraud. The Group strictly complies with the *Criminal Law of the People's Republic of China*, the *Oversight Law of the People's Republic of China*, the *Interim Provisions on Banning Commercial Bribery* and other relevant laws and regulations applicable to the places where the Group operates. The Group has formulated and implemented the *Regulations on the Integrity and Self-Discipline of Employees* to set out requirements and guidelines for employees' integrity and self-discipline behavior norms, supervision mechanisms, and violation handling procedures. To ensure that employees are aware of their responsibilities, we sign the Employee Integrity Agreement with employees to protect the interests of both the Group and employees. At the same time, we also require relevant employees to sign the *Letter of Undertaking of Integrity and Self-Discipline for Employees* and the *Letter of Responsibility for Staff Dispatched to Overseas Companies (Branch)* to strengthen their sense of responsibility for integrity.

Every year, the Group invites judicial authorities and court personnel to conduct anti-corruption training for the management and employees, and at the same time organizes a number of internal anti-corruption special training to effectively enhance employees' awareness of anti-corruption and anti-corruption. During the Reporting Period, the Group carried out special training on the prevention of job-related crimes and law and conducted relevant anti-corruption training for the Board and all employees.

In response to corruption, the Group has also set up a special reporting hotline and email address to receive anonymous reports from internal and external parties. The Group's administrative department, legal department and internal audit department will conduct investigations based on the complaints and whistle-blowing information to ensure its authenticity and collect relevant evidence and propose suggestions for handling according to the investigation results. If the corruption report is verified, the reporting employee will be given a bonus as an encouragement. The Group does not tolerate any form of corruption. If employees are found to be involved in corruption or other criminal offenses, we will transfer the relevant cases to the legal department and judicial authorities for handling. During the Reporting Period, the Group did not receive any concluded legal cases regarding corrupt practices brought against the Group or its employees.

9 Cohesion to Create a harmonious society

The Group always adheres to its corporate social responsibility, actively carries out public welfare undertakings, focuses on the charity work of higher education, and continues to pay attention to and support the development of schools. We maintain close communication with a number of tertiary institutions to understand the needs of education development.

The Group established the "Tiangong Development Scholarship" since 2007. Over the past decade, we have been providing financial assistance to students with financial difficulties at Nanjing Normal University. We hope to alleviate the financial pressure of our students so that they may focus on to learning and enjoy their university life. At the same time, we hope that the scholarship can motivate students to join hands and contribute to the society in the future.

On 6 September 2022, the school-enterprise cooperation and equipment donation ceremony of the Group and Zhongbei College was successfully held in Zhongbei College. The Group donated 5 sets of vehicles milling machine tools and 200 pieces of practical training uniforms to Zhongbei College for the development of practical training courses. The Group also supported college students' innovation and entrepreneurship activities. The cooperation between the two parties will accelerate the pace of joint establishment of industrial colleges, achieve multi-dimensional integration between school and enterprise, and carry out joint construction of majors, mutual recruitment of talents, sharing of teachers and joint construction of courses. The Company actively explored the undergraduate talent cultivation model of school-enterprise cooperation, deepened educational and teaching reforms, and establishes a collaborative team integrating production, education, and research between universities and enterprises.

On 8 September 2022, in order to commemorate the deep friendship between the Group and Nanjing Normal University, Nanjing Normal University permanently named the unique building in Xianlin Campus as "Tiangong Building" and officially unveiled it as a token of appreciation for the Group's strong support for the talent training and career development of the Nanjing Normal University.

During the Reporting Period, the Group actively participated in public welfare donations and donated RMB1,000,000 to the Danyang Charity Federation for charity and public welfare relief efforts, such as assisting with education, medical care, disabilities, poverty, and elderly support for those in need. We donated RMB1,000,000 to Nanjing University to support students in need to complete their education, and donated RMB1,250,000 to Nanjing Normal University to support the development of various businesses of Nanjing Normal University and help students in need to complete their education. We donated 5 mechanical processing machine tools and 200 practical training uniforms to the Zhongbei College, which were used for internship and training courses and college students' innovation and entrepreneurship. The Group's donations are restricted to charitable purposes only and are made for the sole purpose of assisting in community development and educational development, with no donations to the industry associations, lobbying, etc. and for other purposes.

10 ENVIRONMENTAL KEY PERFORMANCE INDICATORS[1]

Indicators	Unit	2022	2021
Output			
Steel and titanium alloy	tonnes	**173,887**	207,006
Product Revenue	RMB10,000	**478,727**	471,848
Air Pollutants[2]			
Sulfur oxides emissions	tonnes	**0.45**	0.69
Nitrogen oxides emissions	tonnes	**46.23**	66.80
Wastewater[3]			
Wastewater discharge	tonnes	**258,058.00**	212,248.00
GHG[4]			
Scope 1: Direct emissions	tonnes of CO_2e	**63,111.94**	91,041.10
Scope 2: Indirect emissions	tonnes of CO_2	**341,756.66**	396,303.89
Total GHG emissions	tonnes of CO_2e	**404,786.32**	489,353.74
Total GHG emissions intensity	tonnes of CO_2e/RMB10,000 revenue from products	**0.85**	1.04
Non-hazardous Waste			
Melting slag	tonnes	**29,700.00**	34,600.00
Waste paper	tonnes	**131.00**	213.68
Total amount of non-hazardous wastes	tonnes	**30,439.91**	34,611.80
Non-hazardous waste intensity	tonnes/RMB10,000 revenue from products	**0.06**	0.07

1 The Group's environmental data covers the following product ranges: die steel, high speed steel, cutting tools and titanium alloys. As the weight of cutting tools cannot be quantified, the density data was optimised for disclosure in 2022 by using the product revenue density data as the denominator to ensure a consistent range of data calculation and to update the relevant data for 2021.

2 The calculation formula of air pollutants in 2022 is based on the *Accounting Methods and Coefficients for Emission Sources Survey*, the *Technical Guidelines for the Compilation of Air Pollutant Emission Inventory for Road Vehicles (Trial)* and the *Technical Guidelines for the Compilation of Air Pollutant Emission Inventory for Non-Road Mobile Sources (Trial)* issued by the Ministry of Ecology and Environment in 2021. The calculation of air pollutant emissions in 2021 is based on the *Accounting Coefficients for Emission from the Second National Census on Pollution Sources (Trial)*, the *Technical Guidelines for the Compilation of Air Pollutant Emission Inventory for Road Vehicles (Trial)* and the *Technical Guidelines for the Compilation of Air Pollutant Emission Inventory for Non-Road Mobile Sources (Trial)*.

3 The increase in water consumption and wastewater discharge figures is due to an increase in the proportion of powder metallurgy used in the production process and an increase in product quality, resulting in an increase in water consumption and in the amount of wastewater generated.

4 The calculation scope and reference of greenhouse gas emissions in 2022 are consistent with that in 2021. The calculation of greenhouse gas emissions of natural gas and diesel is based on the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions of China Iron and Steel Production Enterprises (Trial)*. The calculation of greenhouse gas emissions of gasoline is based on the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions of Road Transport Enterprises (Trial)*. The calculation method and relevant emission factors of greenhouse gas emissions from electricity consumption in 2022 are based on the 2022 national grid average emission factor of 0.5703 t CO_2/MWh as stated in the *Notice on the Management of Greenhouse Gas Emissions Reporting in the Power Generation Industry from 2023 to 2025* issued by the Ministry of Ecology and Environment. The greenhouse gas emissions generated from the use of electricity in 2021 are recalculated data. As the calculation formula is updated, the calculation method and relevant emission factors in 2021 are revised and explained by the Guidelines for *Accounting and Reporting Greenhouse Gas Emissions of Enterprises (Revised in 2021) (Draft for Comments)* issued by the Ministry of Ecology and Environment.

Indicators	Unit	2022	2021
Hazardous Waste			
Acid and alkaline waste	tonnes	**23,942.91**	30,761.00
Other hazardous waste[5]	tonnes	**2,316.25**	2,411.00
Total hazardous waste	tonnes	**26,259.16**	33,172.00
Hazardous waste intensity	tonnes/RMB10,000 revenue from products	**0.05**	0.07
Direct Energy			
Direct energy consumption[6]	megawatt hours	**316,692.71**	457,094.02
Direct energy consumption intensity	megawatt hours/RMB10,000 revenue from products	**0.66**	0.97
Natural gas consumption	ten thousand cubic metres	**2,910.93**	4,207.47
Natural gas consumption intensity	ten thousand cubic metres/ RMB10,000 revenue from products	**0.006**	0.009
Gasoline consumption	litres	**38,764.00**	29,176.26
Gasoline consumption intensity	litres/RMB10,000 revenue from products	**0.08**	0.06
Diesel consumption	litres	**150,396.00**	183,015.00
Diesel consumption intensity	litres/RMB10,000 revenue from products	**0.31**	0.39
Indirect Energy[7]			
Indirect energy consumption (Electricity consumption)	megawatt hours	**605,854.00**	689,185.00
Indirect energy consumption intensity (Purchased electricity consumption intensity)	megawatt hours/RMB10,000 revenue from products	**1.25**	1.45
Purchased electricity	megawatt hours	**599,993.60**	682,627.84
Photovoltaic power generation (Renewable energy)	megawatt hours	**5,860.40**	6,557.16
Water resources[3]			
Water consumption	tonnes	**411,158.00**	286,639.00
Water consumption intensity	tonnes/RMB10,000 revenue from products	**0.86**	0.61
Packaging materials			
Packaging material consumption	tonnes	**3,731.57**	5,205.42
Packaging material consumption intensity	tonnes/RMB10,000 revenue from products	**0.008**	0.011

5 The types of other hazardous wastes in 2022 remain the same as that in 2021, including hazardous wastes such as dust, waste lubricating oil, waste mineral oil and waste batteries collected by dust removal devices during the production process.

6 The unit conversion of energy consumption of natural gas, gasoline, and diesel in 2022 is consistent with that in 2021, with reference to the *Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of China Iron and Steel Manufacturers (Trial).*

7 Indirect energy includes photovoltaic power generation in the disclosure scope of 2022, so the indirect energy consumption in 2021 and the indirect energy consumption intensity in 2021 are updated. To better reflect the relationship between energy consumption intensity and non-renewable energy consumption, the range of indirect energy consumption intensity data is non-renewable energy indirect energy consumption intensity, which does not include renewable energy data. The type of non-renewable energy for the Group's indirect energy is purchased electricity in 2022 and 2021.

11 Social Key Performance Indicators

Indicators	Unit	2022	2021
Number of employees (as at the end of the Reporting Period)			
Total number of employees	no. of employees	**3,203**	3,108
By gender			
Male	no. of employees	**2,298**	2,300
Female	no. of employees	**905**	808
By employment type			
Full-time	no. of employees	**3,203**	3,108
Part-time	no. of employees	**0**	0
By age group			
Under 31 years old	no. of employees	**600**	485
31–50 years old	no. of employees	**1,923**	1,814
Above 50 years old	no. of employees	**680**	809
By geographical region			
Mainland China	no. of employees	**3,117**	2,986
Regions out of Mainland China	no. of employees	**86**	122
Employee turnover rate[8]			
By gender			
Male	percentage	**9%**	9%
Female	percentage	**6%**	8%
By age group			
Under 31 years old	percentage	**5%**	16%
31–50 years old	percentage	**9%**	8%
Above 50 years old	percentage	**9%**	4%
By region			
Mainland China	percentage	**8%**	9%
Regions out of Mainland China	percentage	**3%**	0%
Percentage of employees trained			
Percentage of employees trained[9]	percentage	**100%**	100%
By gender[10]			
Male	percentage	**72%**	73%
Female	percentage	**28%**	27%

8 The calculation formula of employee turnover rate for each category is: the number of employees in the specified category who left/the total number of employees in the category × 100%.

9 The calculation formula for the percentage of employees trained is: number of employees trained/total number of employees × 100%.

10 The calculation formula of the percentage of employees trained of each category is: the number of employees trained of the category/the total number of employees trained × 100%.

Indicators	Unit	2022	2021
By employee category			
Senior management	percentage	**5%**	5%
Middle management	percentage	**12%**	11%
General employees	percentage	**83%**	84%
Average training hours completed per employee			
Average training hours completed per employee[11]	hours	**10**	8
By gender[12]			
Male	hours	**10**	8
Female	hours	**10**	8
By employee category			
Senior management	hours	**26**	23
Middle management	hours	**10**	9
General employees	hours	**9**	7

Indicators	Unit	2022	2021
Number of suppliers			
By geographical region			
Mainland China	no. of suppliers	**550**	521
Regions out of Mainland China	no. of suppliers	**0**	44
Product and service complaints			
Number of products and service-related complaints received	cases	**50**	65
Rate of products and service-related complaints resolved	percentage	**100%**	100%

Indicators	Unit	2022	2021	2020
Work-related injury and fatalities				
Number of work-related fatalities	person	**0**	0	0
Rate of work-related fatalities	percentage	**0%**	0%	0%
Lost days due to work injury	days	**0**	0	0

[11] The calculation formula of average training hours of employees is: total training hours of employees/total number of employees.

[12] The calculation formula of the average training hours of employees in each category is: total training hours of employees in the category/total number of employees in the category.

12 Compliance with ESG-related Laws and Regulations

Aspect of the ESG Guide	Laws and regulations that have a significant impact on the Group that the Group complies with (including but not limited to)	Performance during the Reporting Period
Environmental Aspect		
Aspect A1: Emissions	➢ *Cleaner Production Promotion Law of the People's Republic of China* ➢ *Environmental Protection Law of the People's Republic of China* ➢ *Atmospheric Pollution Prevention and Control Law of the People's Republic of China* ➢ *Water Pollution Prevention and Control Law of the People's Republic of China* ➢ *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes* ➢ *Environmental Protection Tax Law of the People's Republic of China* ➢ *Law of the People's Republic of China on Appraising of Environmental Impacts Assessment* ➢ *Interim Measures of Jiangsu Province on Administration of Hazardous Wastes Management*	No violation of laws and regulations that have a significant impact on the Group relating to exhaust gas and GHG emissions, discharges into water and land, and generation and disposal of waste
Social Aspect		
Aspect B1: Employment	➢ *Labour Law of the People's Republic of China* ➢ *Labour Contract Law of the People's Republic of China* ➢ *Trade Union Law of the People's Republic of China* ➢ *Special Rules on the Labour Protection of Female Employees*	No violation of laws and regulations that have a significant impact on the Group relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, other benefits and welfare
Aspect B2: Health and Safety	➢ *Work Safety Law of the People's Republic of China* ➢ *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* ➢ *Special Equipment Safety Law of the People's Republic of China* ➢ *Standards of Labour Protection Articles of Jiangsu Province* ➢ *Interim Provisions on the Inspection, Elimination and Control of Potential Work Safety Risk*	No violation of laws and regulations that have a significant impact on the Group relating to providing a safe working environment and protecting employees from occupational hazards

Aspect of the ESG Guide	Laws and regulations that have a significant impact on the Group that the Group complies with (including but not limited to)	Performance during the Reporting Period
Aspect B4: Labour Standards	➢ *Labour Law of the People's Republic of China* ➢ *Law of the People's Republic of China on the Protection of Minors*	No violation of laws and regulations that have a significant impact on the Group relating to the prevention of child labour and forced labour
Aspect B6: Product Responsibility	➢ *Work Safety Law of the People's Republic of China* ➢ *Advertising Law of the People's Republic of China* ➢ *Trademark Law of the People's Republic of China* ➢ *Law of the People's Republic of China on the Protection of Consumer Rights and Interests* ➢ *Chemicals Convention*	No violation of any laws and regulations that have a significant impact on the Group relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress
Aspect B7: Anti-corruption	➢ *Criminal Law of the People's Republic of China* ➢ *Company Law of the People's Republic of China* ➢ *Oversight Law of the People's Republic of China* ➢ *Bidding Law of the People's Republic of China* ➢ *Anti-unfair Competition Law of the People's Republic of China* ➢ *Interim Provisions on Prohibition of Commercial Bribery*	No violation of laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering

13 Environmental, Social and Governance Reporting Guide Content Index

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
Mandatory Disclosure Requirements		
Governance Structure	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	2. Consolidate governance and promote sustainable development
Reporting Principles	Materiality: The threshold at which ESG issues determined by the board are sufficiently important to investors and other stakeholders that they should be reported. Quantitative: KPIs in respect of historical data need to be measurable. The issuer should set targets (which may be actual numerical figures or directional, forward-looking statements) to reduce a particular impact. In this way the effectiveness of ESG policies and management systems can be evaluated and validated. Quantitative information should be accompanied by a narrative, explaining its purpose, impacts, and giving comparative data where appropriate. Balance: The ESG report should provide an unbiased picture of the issuer's performance. The report should avoid selections, omissions, or presentation formats that may inappropriately influence a decision or judgment by the report reader. Consistency: The issuer should use consistent methodologies to allow for meaningful comparisons of ESG data over time.	1. About the environmental, social and governance report 3. Stakeholder engagement and materiality assessment
Reporting Scope	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	1. About the environmental, social and governance report

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
"Comply or explain" Provisions		
A. ENVIRONMENTAL		
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A1.1	The types of emissions and respective emissions data.	10. Environmental key performance indicators
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	10. Environmental key performance indicators
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	10. Environmental key performance indicators
A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	4. Energy conservation and emission reduction, practicing green and low carbon
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
B. SOCIAL		
Employment and Labor Practices		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	7. Equal employment and building an excellent team
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	11. Social key performance indicators
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	
B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	6. Safety first and guarantee the whole production progress
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	11. Social key performance indicators
KPI B2.2	Lost days due to work injury.	
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	6. Safety first and guarantee the whole production progress
B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	7. Equal employment and building an excellent team
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	11. Social key performance indicators
KPI B3.2	The average training hours completed per employee by gender and employee category.	
B4: Labor Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	7. Equal employment and building an excellent team
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
Operating Practices		
B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	8. Standardized operation and responsible entity
KPI B5.1	Number of suppliers by geographical region.	11. Social key performance indicators
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	8. Standardized operation and responsible entity
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	
B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	5. Tiangong quality, excellent enterprise
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Due to the nature of the Group's products, we are not involved in product recall for safety and health reasons.
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	5. Tiangong quality, excellent enterprise
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	
KPI B6.4	Description of quality assurance process and recall procedures.	
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	8. Standardized operation and responsible entity
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	
KPI B7.3	Description of anti-corruption training provided to directors and staff.	
COMMUNITY		
B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	9. Cohesion to create a harmonious society
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	

Executive Directors

Mr. ZHU Xiaokun, aged 66, is an Executive Director and the Chairman of the Company. He is responsible for the overall business development strategy of the Group and has over 30 years of experience in special steel and cutting tools industry. Mr. Zhu graduated from the Economic and Management Department of Jiangsu Open University. In 1984, he joined Danyang Houxiang Television Antenna Factory (the predecessor of Jiangsu Tiangong Group Company Limited ("TG Group")) as the general manager. He led the factory to transform from a television antenna factory to an enterprise of HSS cutting tools in 1987 and also subsequently to expand to include the production of HSS in 1992, the production of DS in 2005 and the production of titanium alloy in 2012. He has been acting as the Chairman of the Group since July 1997. In 1998, he was awarded as a National Township Factory Manager, named as a National Township Entrepreneur in 2004 by Ministry of Agriculture, awarded as Model of Work Force in the Jiangsu Province in 2006, Model of the National Steel Industry Work Force in 2008, Top Ten Annual Jiangsu Businessman in 2010, "Most Benevolent Model" on Charitable Donations in Jiangsu Province in 2011, awarded National Labor Medal in 2012, continuously awarded of "Most Honored Business Leader of the Twelfth Five-year Plan in Jiangsu" in 2013 to 2015 and awarded of "National Model Worker" in 2015. Mr. Zhu is the representative of the Thirteenth National People's Congress. Mr. Zhu is the father of the Chief Executive Officer of the Company and the Chief Investment Officer of the Group, Mr. Zhu Zefeng.

Mr. WU Suojun, aged 50, is an Executive Director of the Company and the General Manager of TG Tools. Mr. Wu joined the Group in 1993 as a workshop officer. He is in charge of the purchase, sales, production and operation management of HSS and DS. He is also responsible for the security and environmental works.

Mr. YAN Ronghua, aged 54, is an Executive Director of the Company. He graduated from the Economic and Management Department of the Jiangsu Open University. He joined the Group in 1994. He was appointed as the head of office administration and subsequently the assistant general manager, deputy general manager of the Group. Mr. Yan is currently in charge of external investment management, and monitoring and evaluation of the Group's accounting and warehousing function.

Mr. JIANG Guangqing, aged 58, is an Executive Director of the Company. He graduated from Aerospace Industry 061 Base Technical School (航天工業零六一基地技工學校), joined the Group in 1993 and currently is the special assistant of the general manager. He is in charge of the production, operation and management of cutting tools.

Independent Non-Executive Directors

Mr. GAO Xiang, aged 79, joined the Company in 2007 as an Independent Non-Executive Director. In July 1966, he graduated from Wuhan Institute of Mechanics, majoring in production craftsmanship of machines and equipment. He is a senior engineer. Under his leadership, the study of twist drill extrusion technology by Chengdu Tools Research Institute was honoured with Third Class Award of Technical Findings of the Ministry of Mechanics. His achievements are widely recognized in the industry, and he has been granted special government subsidy by the State Council since 1999 as a result of such achievements.

Mr. Lee Cheuk Yin, Dannis, aged 52, joined the Company as an Independent Non-executive Director in 2010. He obtained the Bachelor of Business Administration from Texas A & M University, the USA. He is an associate member of the Hong Kong Institute of Certified Public Accountants and a member of the American Institute of Certified Public Accountants. He possesses over 20 years of experience in accounting and auditing field. Mr. Lee is currently a managing director of DLK Advisory Limited, and is an independent non-executive director of Geely Automobile Holdings Limited (Stock Code of HKEx: 175), CMBC Capital Holdings Limited (formerly known as Skyway Securities Group Limited, Stock Code of HKEx: 1141), Cathay Media and Education Group Inc. (Stock Code of HKEx: 1981) and C&D Property Management Group Co., Ltd. (Stock Code of HKEx: 2156). He was an independent non-executive director of U-Home Group Holdings Limited (Stock Code of HKEx: 2327) (resigned in 2015) and Southern Energy Holdings Group Limited (formerly known as China Unienergy Group Limited, Stock Code of HKEx: 1573) (resigned in 2019), and an independent director of Gridsum Holding Inc. (GSUM.US) (resigned in 2021).

Mr. WANG Xuesong, aged 51, joined the Company as an Independent Non-executive Director in 2016. He is a holder of a Bachelor's Degree in Electronic Engineering from the Tsinghua University and a Master's Degree of Business Administration from the Columbia University. Mr. Wang has been the project manager of Sun Microsystems, Inc., responsible for the development of the world's leading fourth and fifth generations of UltraSPARC CPU chips. He has been awarded the second class National Science Progress Award of the People's Republic of China with his development in 32-bit slot in CPU technology. He has over 10 years of management and engineering experience in various industries in Silicon Valley in the United States and in China. Further, Mr. Wang has nearly 20 years of operating and investment experience in the United States and China. He has been a principal of China Renaissance Capital Investment, where he was responsible for private equity investments. He has also been an executive director and a senior investment member of China Everbright Investment and Assets Management Co., Ltd. Mr. Wang was a co-founding partner of Everbright ReinFore in 2013 and is currently a member of the firm's Investment Committee.

Senior Management

Mr. ZHU Zefeng, aged 41, is the Chief Executive Officer of the Company and the Chief Investment Officer of the Group. He graduated with advanced diploma in Business Operation Management from the Durham College, Canada. He joined the Company as management trainee in January 2016 to acquire the relevant experience and knowledge of the manufacturing process of the Group's products. He also involved in investigation and investment project on downstream subcontractor. Prior to his joining, he worked for TopTech Tools Manufacturing Inc. as an operation manager, with over 7 years of experience in overlooking and integration of upstream and downstream operation of its special steel business. His prime focus is to execute the Group's future investment strategy, in particular, in the integration of upstream and downstream component of the supply chain of the Group's existing business, as approved by the Board from time to time. Mr. Zhu is the son of the Executive Director and Chairman of the Company, Mr. Zhu Xiaokun.

Mr. JIANG Rongjun, aged 59, is an Executive Director and the General Manager of TG Tech. He joined the Group in 1985 as a workshop officer. Mr. Jiang is currently in charge of the production, sales and management of titanium alloy plant.

Mr. LIAO Jun, aged 57, is the Chief Technology Officer of the Group. He graduated from the College of Materials Science and Engineering of Chongqing University and acquired an Executive MBA from Shanghai Jiao Tong University in 2008. Prior to joining the Company in July 2014 as head of innovation and technology department, he worked as deputy chief of technical section of Shanghai No. 5 Steel Co., Ltd. He then served as deputy head of technical center of China Bao Steel Group and director of its branch steel plant. He has over 30 years of experience in special steel production and technology innovation. Mr. Liao is taking the responsibility of the Company's technology advance and development in order to enhance the product grading, technical specification and quality control.

Mr. WANG Gang, aged 39, is the Chief Financial Officer of the Group. He graduated with a master's degree from the Royal Institute of Technology, Sweden. He is a member of The Chinese Institute of Certified Public Accountants. Prior to joining the Group in August 2015, he worked in KPMG Hong Kong and KPMG China and was promoted to the position of audit manager of KPMG China. Mr. Wang then joined TG Group as chief accountant in 2014. He was appointed as a director and the financial controller of TG Tech from August 2015 and subsequently resigned from the position of financial controller in TG Tech in January 2017, in preparation for the appointment as the Chief Financial Officer of the Company. Mr. Wang has over 10 years of experience in the fields of finance, auditing, accounting and administration and is familiar with the business and operation of the Group.

Mr. LEE Johnly, aged 43, is the Financial Controller and Company Secretary of the Company. Mr. Lee joined the Group in July 2015 and has over 15 years of experience in the field of finance, auditing, accounting and administration, including working in the assurance and advisory business services department of Ernst & Young Certified Public Accountants. Mr. Lee graduated with a Bachelor's Degree in Accountancy from the Hong Kong Polytechnic University. He is a member of The Hong Kong Institute of Certified Public Accountants.

CORPORATE GOVERNANCE REPORT

The Group strives to attain and maintain high standards of corporate governance and to apply the principles set out in the Corporate Governance Code (the "Code") set out in Appendix 14 to the Listing Rules as it believes that good corporate governance practices are fundamental to the Group's development and essential for safeguarding shareholders' interests. To achieve this objective, the Group strengthens its internal policies and procedures, provides continuous training to its staff and increases the transparency of its operation and accountability to all shareholders. The Group is committed to improving this practice and maintaining an ethical corporate culture. Save as disclosed below, during the year ended 31 December 2022, the Group has complied with the applicable principles and code provisions set out in the Code.

The Board

The Board's primary role is to secure and enhance long-term shareholder value. It focuses on the Group's overall strategic policy and provides proper supervision to ensure effective management and to achieve sound returns for its shareholders. The Board has delegated the authority and responsibility for implementing business strategies and management of the daily operations of the Group's business to the management. The Board is mainly responsible for developing long term objectives and strategy of the Group, monitoring operation performance and results, monitoring performance of the management, establishing dividend policy and reviewing significant investment plans and decisions. The Board meets at least four times a year and additional meetings are held when required to discuss significant events and issues.

The Board is responsible for determining the policy for corporate governance of the Company and performing the corporate governance duties including:

(a) to develop and review the Company's policies and practices on corporate governance;

(b) to review and monitor the training and continuous professional development of Directors and senior management;

(c) to review and monitor the Company's policies and practices in compliance with legal and regulatory requirements;

(d) to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors; and

(e) to review the Company's compliance with the Code.

Corporate governance duties performed by the Board during the year were covered in the below sections of the corporate governance report.

The company secretary of the Company (the "Company Secretary") assists the Chairman in preparing the agenda for Board meetings and all Directors shall have access to the advice and services of the Company Secretary with a view to ensuring that Board procedures, and all applicable rules and regulations are followed. All Directors can give notice to the Chairman of the Board or the Company Secretary if they intend to include matters in the agenda for Board meetings. Regular board meetings are held with at least 14 days' advance notice, and all Directors would be served with an agenda with supporting papers at least 3 days before the intended date of a Board meeting, so as to ensure that there is timely access to relevant information. The Group ensures that all the Board members are informed of the Group's latest developments and thereby assists them in the discharge of their duties. Procedures have been agreed by the Board to enable the Directors to seek independent professional advice, at the Company's expense.

Number of Meetings and Directors' Attendance

	Attendance/Number of Board Meetings			
Name of Director	**Board Meeting**	**Audit Committee**	**Remuneration Committee**	**Nomination Committee**
Mr. Zhu Xiaokun *(Chairman)*	9/9	N/A	1/1	1/1
Mr. Wu Suojun	9/9	N/A	N/A	N/A
Mr. Jiang Guangqing	9/9	N/A	N/A	N/A
Mr. Yan Ronghua	9/9	N/A	N/A	N/A
Mr. Gao Xiang	9/9	2/2	1/1	1/1
Mr. Lee Cheuk Yin Dannis	9/9	2/2	1/1	1/1
Mr. Wang Xuesong	9/9	2/2	1/1	1/1

General Meetings With Shareholders

The Company's annual general meeting provides a useful platform for direct communication between the Board and its shareholders. Separate resolutions are proposed on each substantially separate issue at the general meetings.

The annual general meeting ("AGM") was held on 2 June 2022. Mr. Lee Cheuk Yin, Dannis acted as the chairman of the AGM.

The attendance records of the Directors at the shareholders' meetings held in the year 2022 are set out below:

	AGM
Executive Directors	
Mr. Zhu Xiaokun *(Chairman)*	✓*
Mr. Wu Suojun	–
Mr. Jiang Guangqing	–
Mr. Yan Ronghua	–
Independent non-executive Directors	
Mr. Gao Xiang	–
Mr. Lee Cheuk Yin Dannis	✓
Mr. Wang Xuesong	✓

* Due to COVID-19 pandemic, Mr. Zhu Xiaokun attended the AGM by way of video conference.

In respect of the code provision C.1.6 of the Code which requires that independent non-executive directors and other non-executive directors should attend general meetings, Mr. Gao Xiang, the Independent Non-executive Director, were unable to attend the AGM due to the COVID-19 pandemic.

Minutes of the Board and Board Committees which record in sufficient detail the matters considered by the Board and the Board Committees and their decisions reached, including any concerns raised by Directors or dissenting views expressed are taken by the Company Secretary. Such minutes of the Board and Board Committees, together with supporting papers, are open for inspection following reasonable notice by any Director. Draft and final versions of minutes were sent to all Directors for their comment and records within a reasonable time after the relevant meeting was held. The Company has arranged appropriate insurance cover on Directors' liabilities in respect of legal actions against them arising from corporate activities.

Composition of the Board

The Board comprises four Executive Directors (Mr. Zhu Xiaokun, Mr. Wu Suojun, Mr. Yan Ronghua and Mr. Jiang Guangqing), and three Independent Non-Executive Directors (Mr. Gao Xiang, Mr. Lee Cheuk Yin, Dannis and Mr. Wang Xuesong). Biographical details of the Directors as at the date of this report are set out on pages 89 to 91 of this annual report.

Independent Non-Executive Directors account for more than one-third of the members of the Board. The Independent Non-Executive Directors come either from the steel industry or have related professional background, bringing valuable expertise and experience that promotes the best interests of the Company and its shareholders. The role of the Independent Non-Executive Directors is to provide independent and objective opinions to the Board for its consideration, take the lead where potential conflicts of interests arise, serve on the audit, remuneration and nomination committees and scrutinise the Company's performance in achieving agreed corporate goals and objectives, and monitor the reporting of performance. The Company has received an annual confirmation of independence from each of the Independent Non-Executive Directors. The Company is of the view that all the Independent Non-Executive Directors meet the guidelines for assessing independence as set out in Rule 3.13 of the Listing Rules and considers each of them to be independent.

The Company had adopted a Board diversity policy aiming to set out the approach to achieve the diversity of the Board. The Company recognises and embraces the benefits of having a diverse Board to enhance the quality of its performance. It endeavours to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the requirements of the Company's business. All Board appointments will continue to be made on a merit basis with due regard for the benefits of diversity of the Board members.

The Nomination Committee will follow a range of diversified perspectives, including but not limited to gender, age, cultural and educational background, professional experience, skills, knowledge and length of service. The ultimate decision will be made upon the possible contribution that the selected candidates will bring to the Board.

As at the date of this report, there is no female Director in the Board of the Company. The Company will appoint at least one female Director before 31 December 2024 in accordance with the relevant requirements of the Listing Rules. Save as disclosed, the Nomination Committee considered that the current composition of the Board is balanced in terms of diversity and is able to meet the objectives of the Board. The Board's diversity provides the Company with experienced individuals and professionals with proven and extensive industry experience whose opinions and expertise are useful for the decision-making of the Board and the implementation of its business directives.

Directors and Company Secretary's Continuous Training and Development

Directors also participate in continuous professional development to develop and refresh their knowledge and skills. The Company has from time to time provided information and updates to the Directors on the latest developments regarding the Listing Rules and other applicable regulatory requirements so as to ensure the Directors are in compliance with good corporate governance practices.

During the year ended 31 December 2022, all Directors have been provided with and read seminar materials covering topics including the Code, the disclosure of inside information and updates relating to the latest development of the Listing Rules and other applicable regulatory requirements to refresh their knowledge and to facilitate the discharge of their responsibilities. Each of the Directors has provided to the Company his records of training received during the financial year ended 31 December 2022.

The participation by individual Directors in the continuous professional development during the year is recorded in the table below:

	Attending training, seminars, conference or forums	Reading materials, journals and updates relating to corporate governance, regulatory development and other relevant topics
Executive Directors		
Mr. Zhu Xiaokun	✓	✓
Mr. Wu Suojun	✓	✓
Mr. Jiang Guangqing	✓	✓
Mr. Yan Ronghua	✓	✓
Independent non-executive Directors		
Mr. Gao Xiang	✓	✓
Mr. Lee Cheuk Yin Dannis	✓	✓
Mr. Wang Xuesong	✓	✓

For the financial year ended 31 December 2022, the Company Secretary has taken no less than 15 hours of relevant professional training.

Chairman and Chief Executive Officer

The Chairman of the Board is Mr. Zhu Xiaokun, and the Chief Executive Officer is Mr. Zhu Zefeng. The Chairman's and the Chief Executive Officer's roles and responsibilities are clearly defined to ensure their independence and a balance of power and authority. The Chairman of the Board provides leadership for the Board and he is responsible for the overall management of the Board and monitoring the Group's business strategies, while the Chief Executive Officer is responsible for the Group's day-to-day management in accordance with the instructions issued by the Board and operating the business of the Group and implementing policies and strategies adopted by the Board. Save as disclosed in the section "Directors & Senior Management" of this report, there is no relationship (including financial, business, family or other material/relevant relationship(s) among the Directors.

In 2022, the Chairman has held a meeting with the Independent Non-Executive Directors without the Executive Directors being present.

Appointment, Re-election and Removal of Directors

While there was no appointment of new Directors this year, a person may be appointed as a member of the Board at any time either by shareholders' resolutions in general meetings or by resolutions of the Board upon recommendation by the Nominations Committee of the Company. New Directors appointed by the Board during the year are required to retire and submit themselves for re-election at the first general meeting immediately following their appointments.

Each newly appointed Director is provided with induction material on the first occasion of his/her appointment, so as to ensure that he/she has an appropriate understanding of the business and operations of the Group and that he/she is sufficiently aware of his/her responsibilities and obligations under the Listing Rules, code of conduct and other relevant regulatory compliance requirements.

All Directors are required to retire by rotation at least once every three years at the annual general meeting, subject to re-election by the shareholders. All Non-Executive Directors (including Independent Non-Executive Directors) are appointed for a term of not more than three years.

Board Committees

The Board has established three Board Committees to oversee different aspects of the Company's affairs. These Board Committees include the Audit Committee, the Remuneration Committee and the Nomination Committee. The Board Committees have been structured to include a majority of Independent Non-Executive Directors as members in order to ensure that all relevant issues are reviewed independently and objectively. These Board Committees will report back to the Board on their decisions or recommendations. The terms of reference of the respective Board Committees have complied with the Code provisions and are available on the Company's website www.tggj.cn and the website of the Stock Exchange www.hkexnews.hk.

Audit Committee

The Audit Committee comprises three Independent Non-Executive Directors, namely, Mr. Lee Cheuk Yin, Dannis, Mr. Gao Xiang and Mr. Wang Xuesong. The Chairman of the Audit Committee, Mr. Lee Cheuk Yin, Dannis, possesses expertise in accounting, auditing and finance.

Under its terms of reference, the Audit Committee is mainly responsible for overseeing the Company's financial reporting system and internal procedures, reviewing the financial information of the Company and overseeing the relationship with external auditors. These include reviewing and recommending for the Board's approval the interim and the annual financial statements; reviewing the external auditors' independence, objectivity and the effectiveness of the audit process; and reviewing and recommending to the Board for approval of the external auditor's remuneration; reviewing and obtaining explanation from management and the external auditor on the results for the year, including causes of changes from the previous period, effects on the application of new accounting policies, compliance with the Listing Rules and relevant legislation, and any audit issues, before recommending their adoption by the Board; considering and proposing to the Board the re-appointment of the Company's external auditors; considering and approving the procedures and guidelines in employing the external auditor to perform non-audit assignments for the Company; receiving and reviewing the internal audit reports from the internal auditor; holding meetings with the external auditors in the absence of management to discuss any audit issues; holding meetings with the internal auditor in private to discuss internal audit issues; approving the internal audit program for the year; carrying out a review of the internal control and risk management systems of the Company during the year including the adequacy of resources, qualifications and experience of staff of the Company's accounting and financial reporting function, and their training programs and budget and review of the effectiveness of the internal control and risk management systems of the Group. The Audit Committee has been provided with sufficient resources to discharge its duties.

The Audit Committee had held a meeting on 23 March 2023 to consider and review the 2022 annual report and annual financial statements of the Group and to give their opinion and recommendation to the Board. The Audit Committee considered that the 2022 annual report and annual financial statements of the Company have complied with the Listing Rules and the applicable accounting standards and the Company has made appropriate disclosure thereof.

The Audit Committee held two meetings in 2022 and one meeting to date in 2023.

The meetings were held together with the external auditors of the Company, the Chief Financial Officer, and the Financial Controller of the Company, to discuss auditing, risk management, internal control, internal audit functions and financial reporting matters which include the review of the interim and annual financial statements. Full minutes of the Audit Committee meetings were kept by the Company Secretary. Draft and final versions of such minutes were sent to all members of the Audit Committee for their comment and records respectively, in both cases within a reasonable time after the meeting. The Audit Committee has made recommendations to the Board on the reappointment of the external auditors and their remuneration and terms of engagement and reviewed their independence. No former partner of KPMG, the existing auditing firm of the Company, was acting as a member of the Audit Committee for a period of 1 year from the date of his ceasing to be a partner of the firm; or to have any financial interest in the firm.

Remuneration Committee

The Remuneration Committee comprises one Executive Director, namely, Mr. Zhu Xiaokun, and three Independent Non-Executive Directors, namely, Mr. Gao Xiang, Mr. Lee Cheuk Yin, Dannis and Mr. Wang Xuesong. Mr. Wang Xuesong is the Chairman of the Remuneration Committee.

The primary role of the Remuneration Committee is to make recommendation to the Board on the Company's policy and structure for remuneration (including but not limited to share schemes) of Directors and senior management and to ensure that their compensation arrangements are determined in accordance with relevant contractual terms. No Director and any of his associates has taken part in any discussion on his own remuneration. Details of the fees of the Directors are set out in note 10 to the financial statements. The Company's remuneration policy is to maintain fair and competitive remuneration packages based on business needs and market practice. Factors such as market rate, an individual's qualification, experience, performance and expected workload are taken into account during the remuneration package determination process. The Remuneration Committee has consulted the Chairman of the Board, Mr. Zhu Xiaokun or the Chief Executive Officer, Mr. Wu Suojun, about their proposals relating to the remuneration of other Executive Directors and have access to professional advice if considered necessary. The Remuneration Committee was provided with sufficient resources to discharge its duties.

The Remuneration Committee held one meeting in 2022 and one meeting to date in 2023.

The meetings were held to assess the performance of the Directors and senior management, approve the terms of executive Director's service contracts, discuss and review the overall remuneration policy and structure. Recommendations have been made to the Board on the remuneration packages of individual executive Directors and senior management.

For the year ended 31 December 2022, the remuneration of the Directors and senior management is listed as below by band:

Band of remuneration	No. of persons
RMB0 to RMB1,000,000	9
RMB1,000,000 to RMB2,000,000	3

Further details of the remuneration of Directors and the 5 highest paid employees have been set out in notes 10 and 11 to the financial statements.

Nomination Committee

The Nomination Committee comprises one Executive Director, namely, Mr. Zhu Xiaokun, and three Independent Non-Executive Directors, namely, Mr. Gao Xiang, Mr. Lee Cheuk Yin, Dannis and Mr. Wang Xuesong. Mr. Gao Xiang is the Chairman of the Nomination Committee.

The primary responsibility of the Nomination Committee is to make recommendations to the Board on matters relating to the appointment or re-appointment of Directors and succession planning for Directors, and assessing the independence of the Independent Non-Executive Directors. The Nomination Committee has been provided with sufficient resources to discharge its duties.

The Nomination Committee has adopted the terms of reference as outlined under the Code provisions regarding the selection, recommendation and nomination of candidates for directorship during the year. The current terms of reference of the Nomination Committee are available on the websites of the Company and the Stock Exchange.

The Nomination Committee held one meeting in 2022 and one meeting to date in 2023. The meetings were held to discuss and review the composition and structure of the Board and senior management and the re-appointment arrangement of the Directors in the Company's forthcoming annual general meeting. The Executive Directors were appointed based on their qualification and experience in relation to the Group's business. The Independent Non-Executive Directors were appointed based on their professional qualifications and experience in their respective areas.

Directors' Responsibility for the Financial Statements

The Directors are responsible for overseeing the preparation of financial statements on a going concern basis, with supporting assumptions or conditions as necessary, for each financial period with a view to ensuring that such financial statements give a true and fair view of the state of affairs of the Group and of the results and cash flow for that financial year. Management of the Company has provided such explanation and information to the Board to enable the Board to make an informed assessment of the financial and other information put before the Board for approval. The Company's accounts are prepared in accordance with the Listing Rules, the Companies Ordinance, all relevant statutory requirements and applicable accounting standards. The Company has selected appropriate accounting policies and has applied them consistently based on prudent and reasonable judgments and estimates.

The Directors endeavor to ensure a balanced, clear and understandable assessment of the Company's position and prospects in annual reports, interim reports, price-sensitive announcements and other disclosures required under the Listing Rules and other statutory requirements.

Internal Control and Risk Management

Sound internal control and risk management systems enhance the effectiveness and efficiency of operations, ensures compliance with laws and regulations and mitigates the Group's business risk. The Company has an internal audit function. The Board is responsible for the internal control and risk management systems of the Group and reviewing their effectiveness and adequacy. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Board and the Group's management hold meetings on a regular basis to review and evaluate the Group's business operations, production processes and financial reporting processes, adequacy of resources, qualifications and experience of staff of the Group's accounting and financial reporting function, their training programmes and budget in order to achieve reasonable assurance of the following:

- Effectiveness and efficiency of operations

- Reliability of financial reporting

- Compliance with applicable laws and regulations

To maintain effective internal control and risk management systems that helps The Group to achieve its business objectives and safeguard its assets, the Group has implemented measures including: (i) establishing written policies and work flow for major operations and production cycles; (ii) having in place appropriate segregation of duties; and (iii) setting proper authorisation levels.

The Group has established an internal control and monitoring department to perform the internal control review on every workshop and department and furnish opinions to the Board in respect of material matters or bring to the attention of the management the existence of any relevant risks to prevent internal control defects. This department is responsible for performing independent review of the adequacy and effectiveness of the risk management and internal control systems.

The Board also ensures timely publication of the Group's financial statements and aims to present a clear, balanced and understandable assessment of the Group's performance and position through all its publications and communications to the public and complies with the requirements under the applicable rules and regulations about timely disclosure of inside information.

The Board, through the Audit Committee, have conducted a review covering all material controls, including financial, operational and compliance controls and risk management functions of the Group for the year ended 31 December 2022. The Audit Committee and the Board were not aware of any areas of concern that would have a material impact on the Group's financial position or results of operations and, having taken into account of the adequacy of resources, staff qualifications and experience, training programs, internal audit and financial reporting functions, considered that effective and adequate internal control and risk management systems of the Group had been in place and had been functioning effectively.

External Auditors

KPMG was re-appointed as the external auditors of the Company by the shareholders at the AGM until the next annual general meeting. In order to maintain their independence, objectivity and effectiveness in performing the audit services, the Audit Committee pre-approved all audit services and discussed with KPMG the nature and scope of the audit services. KPMG is primarily responsible for providing audit services in connection with the annual consolidated financial statements.

During the year ended 31 December 2022, the total remuneration paid or payable to KPMG was RMB7,655,000, including RMB6,695,000 for consolidated financial statements audit service and RMB960,000 for non-audit professional service.

The Model Code for Securities Transactions by Directors of Listed Issuers

The Group has adopted a code of conduct governing securities transactions by Directors in compliance with and on terms no less exacting than the required standard set out in the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules (the "Model Code"). All of the Directors have confirmed, following specific enquiry by the Company, that they have complied with the required standard set out in the Model Code and the Group's code of conduct governing securities transactions by Directors and employees who may possess or have access to price sensitive information or inside information during the year ended 31 December 2022.

Independent views

The Company will ensure that there are channels (in addition to independent non-executive directors) where independent views are available, including but not limited to availability of access by directors of the Company to external independent professional advice, at the Company's expense, to assist their performance of duties.

The Board had reviewed the implementation and effectiveness of the mechanisms in place to ensure independent views and input are available to the Board during the reporting period and is satisfied that such mechanisms have been successfully implemented and are effective.

Dividend Policy

The Group adopted the Dividend Policy on January 2020. It aims to manage its optimal capital efficiently and generate long-term sustainable value for shareholders, while balancing operational and regulatory requirements. It also aims to grow its dividend in line with business growth and to share the benefits of its success with its shareholders.

The declaration and payment of dividends shall remain to be determined at the sole discretion of the Board and subject to any applicable restrictions, laws, rules and regulations.

Given the extent of the Novel Coronavirus (COVID-19) may impact on the global economy is currently difficult if not impossible to estimate, the Company will not conclude any pre-determined dividend payout ratio for the coming financial year(s).

In proposing any dividend payout, the Board shall take into account of the following factors:

- the actual and expected financial performance of the Group;
- the general financial position of the Group;
- the working capital requirements, capital expenditure requirements and future development strategy of the Group;
- restrictions imposed by any debt covenants;
- the general market conditions;
- the business cycle of the Company's business;
- the potential impact of Novel Coronavirus (COVID-19) on the products and operation of the Group; and
- any other factors that the Board deems appropriate.

Any final dividends declared by the Company must be approved by an ordinary resolution of the shareholders at an annual general meeting and must not exceed the amount recommended by the Board.

Shareholders' Rights

Set out below is a summary of certain rights of the shareholders of the Company as required to be disclosed pursuant to the Code:

Convening of extraordinary general meeting on requisition or putting forward proposals at general meetings by shareholders

In accordance with the section 79 of the Company's articles of association, general meetings may be convened on the written requisition of any two or more members of the Company deposited at the registered office of the Company in Hong Kong specifying the objects of the meeting and signed by the requisitionists, provided that such requisitionists held as at the date of deposit of the requisition not less than one tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company. General meetings may also be convened on the written requisition of any one member of the Company which is a recognised clearing house (or its nominee(s)) deposited at the registered office of the Company in Hong Kong specifying the objects of the meeting and signed by the requisitionist, provided that such requisitionist held as at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company.

If the Board does not within 21 days from the date of deposit of the requisition proceed duly to convene the meeting to be held within a further 21 days, the requisitionists themselves or any of them representing more than one-half of the total voting rights of all of them, may convene the general meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months from the date of deposit of the requisition, and all reasonable expenses incurred by the requisitionists as a result of the failure of the Board shall be reimbursed to them by the Company.

Shareholders may also make use of the above mechanism in putting forward proposals at a general meeting. In order to allow shareholders to make an informed decision at the relevant general meeting, requisitionists are requested to provide contact details to the Board at the time of deposition of the requisition in case further information is required to be included in the notice of meeting.

Shareholders should note that the Company is required to give notice of an extraordinary meeting of not less than 10 clear business days (pursuant to Listing Rules requirements) and not less than 14 days (pursuant to the articles of association of the Company).

Procedures for directing shareholders' enquiries to the Board

Shareholders may at any time send their enquiries and concerns to the Board of the Company in writing through the Company Secretary whose contact details are as follows:

The Company Secretary
Tiangong International Company Limited
20/F, Tien Chu Commercial Building
173–174 Gloucester Road, Wanchai, Hong Kong
Email: wing.lee@tggj.cn
Tel No.: (852) 3102-2386
Fax No.: (852) 3102-2331

The Company Secretary shall forward the shareholders' enquiries and concerns to the Board and/or relevant Board Committees of the Company, where appropriate, to answer the shareholders' questions.

Investor Relationship and Communication

The Company recognizes the importance of communication with shareholders and accountability to shareholders and has adopted a shareholders' communication policy, which is subject to annual review to ensure its implementation and effectiveness. Such policy aims to ensure that shareholders will have equal and timely access to information about the Company, so as to enable them to exercise their rights in an informed manner and to allow them to engage actively with the Company. A summary of the Company's shareholders' communication policy is set out below: Annual and interim reports offer comprehensive operational and financial performance information to shareholders and the annual general meetings provide a forum for shareholders to make comments and raise concerns to the Board directly. The Group's senior management also maintains close communication with investors, analysts and the media by other channels including roadshows, briefings and individual meetings. The Group has set up its own website www.tggj.cn, which is updated on a regular basis, as a means to provide updated information on the Company to investors. Shareholders are encouraged to attend the forthcoming annual general meeting of the Company for which not less than 21 days' notice (pursuant to the articles of association of the Company) is given. At the meeting, the Chairman of the Board, the Chairman of the Board Committees (or their respective committee members) and the Directors are available to answer questions on the Group's business. The Company has reviewed the implementation and effectiveness of its shareholders' communication policy for the year ended 31 December 2022, including the steps taken at the general meetings, the handling of enquiries received and the multiple communication channels in place. The Company is of the view that the policy is effective and has been properly implemented.

Amendments were made to certain articles of the Articles of Association of the Company during the reporting period, for details of which, please refer to the announcement of the Company published on 27 April 2022.

REPORT OF THE DIRECTORS

The Directors are pleased to submit the annual report together with the audited financial statements for the year ended 31 December 2022.

Principal Place of Business

The Company is a company incorporated and domiciled in Cayman Islands and has its principal place of business at Zhenjiang City, Jiangsu Province, the PRC.

Principal Activities

The principal activities of the Company are the production and sales of DS, HSS, cutting tools and titanium alloy. The principal activities and other particulars of the subsidiaries are set out in note 18 to the financial statements.

Financial Statements

The results of the Group for the year ended 31 December 2022 are set out in the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income on pages 124 and 125.

The financial position of the Group as at 31 December 2022 is set out in the consolidated statement of financial position of the Group on pages 126 to 127. The financial position of the Company as at 31 December 2022 is set out in note 37 to the financial statement on page 215.

The cash flows of the Group for the year ended 31 December 2022 are set out in the consolidated cash flow statement on pages 130 to 131.

Results and Appropriations

The Board proposed a final dividend payment of RMB0.0362 per share for the financial year ended 31 December 2022 (2021: RMB0.0594).

Charitable Donations

Charitable donations made by the Group during the year amounted to RMB2,848,000 (2021: RMB2,610,000).

Property, Plant and Equipment

Details of the movements in the property, plant and equipment of the Group during the year are set out in note 14 to the financial statements.

Reserves

Details of movements in the reserves of the Company and of the Group during the year are set out in note 33 to the financial statements and in the consolidated statements of changes in equity, respectively.

Distributable Reserves

Distributable reserves of the Company as at 31 December 2022, calculated in accordance with the Companies Law (Cap. 22) (Law 3 of 1961, as consolidated and revised) of the Cayman Islands, amounted to RMB1,694,347,000 (2021: RMB1,796,909,000).

Pre-emptive Rights

There is no provision for pre-emptive rights under the Company's articles of association and there is no restriction against such rights under the laws of the Cayman Islands, which would oblige the Company to offer new shares on a pro-rata basis to existing shareholders.

Share Capital

Details of the movements in share capital of the Company during the year are set out in note 33 to the financial statements.

Business Review

The principal activities of the Group, a review of the business of the Group during the year and a discussion on the Group's future business development are provided in the management discussion and analysis and the Chairman's statement of this annual report. Descriptions of possible risks and uncertainties that the Group may be facing and an analysis of the Group's performance during the year using financial key performance indicators is provided on pages 6 to 25 of this annual report. Particulars of important events affecting the Group that have occurred since the end of the financial year are provided in note 40 to the financial statements.

In addition, further information of the Company's environmental protection policies and compliance with relevant laws and regulations which have a significant impact on the Group are provided in the ESG Report and in the management discussion and analysis of this annual report. An account of the Company's relationships with its key stakeholders are disclosed in the section heading "Relationships with key stakeholders" on page 25 of the management discussion and analysis of this annual report.

Directors

The Directors during the financial year were:

Executive Directors

Mr. Zhu Xiaokun
Mr. Wu Suojun
Mr. Yan Ronghua
Mr. Jiang Guangqing

Independent Non-Executive Directors

Mr. Gao Xiang
Mr. Lee Cheuk Yin, Dannis
Mr. Wang Xuesong

Directors will retire by rotation in accordance with the requirement of the Listing Rules and the articles of association of the Company in the annual general meetings.

The Independent Non-Executive Directors are appointed for periods of one year. The Company considers that Mr. Gao Xiang, Mr. Lee Cheuk Yin, Dannis and Mr. Wang Xuesong are independent pursuant to the criteria set out in the Listing Rules and that a confirmation of independence has been received from each of them.

Directors' and Chief Executive's Interests and Short Positions in Shares, Underlying Shares and Debentures

As at 31 December 2022, the interests, long positions or short positions of the Directors and chief executive of the Company in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) which were recorded in the register required to be kept under Section 352 of the SFO, or which were notified to the Company and the Stock Exchange pursuant to the Model Code (set out in Appendix 10 of the Listing Rules) were as follows:

(a) Interests in the Company

Director's name	Interests	Ordinary shares held	Approximate attributable interests (%)
Zhu Xiaokun[1]	Interests of controlled corporations	774,758,000 (L)	27.82
	Beneficial owner	6,800,000 (L)	0.24
			28.06
Zhu Zefeng	Interests of controlled Corporations[2 and 3]	680,926,521 (L)	24.45
	Beneficial owner	1,500,000 (L)	0.05
			24.50
Wu Suojun	Beneficial owner	2,400,000 (L)	0.09
Yan Ronghua	Beneficial owner	1,500,000 (L)	0.05
Jiang Guangqing	Beneficial owner	900,000 (L)	0.03

Notes:

As at 31 December 2022,

(1) Tiangong Holdings Company Limited ("THCL") held 774,758,000 ordinary shares. THCL was held as to 89.02% and 10.98% by Zhu Xiaokun and Yu Yumei, the spouse of Zhu Xiaokun, respectively. Zhu Xiaokun is deemed to be interested in the 774,758,000 shares held by THCL.

(2) Zhu Zefeng controlled 100% of Sky Greenfield Investment Limited, held 636,994,521 ordinary shares.

(3) Silver Power (HK) Limited, which was wholly owned by Sky Greenfield Investment Limited, held 43,932,000 ordinary shares.

(L) Represents long position.

(b) Interests in the shares of associated corporations

Name of Director	Name of associated corporation	Nature of interests and capacity	Total number of shares	Approximate percentage of interests (%)
Mr. Zhu Xiaokun	THCL	Beneficial owner	44,511 (L)	89.02
		Spousal interest[1]	5,489 (L)	10.98
Mr. Zhu Xiaokun	TG Tech	Beneficial owner	14,483,951 (L)[2]	2.47

Notes:

(1) Ms. Yu Yumei, the spouse of Mr. Zhu Xiaokun held 5,489 shares in THCL. Mr. Zhu Xiaokun is deemed to be interested in such 5,489 shares in THCL.

(2) Mr. Zhu Xiaokun held 14,483,951 shares in TG Tech.

(L) Represents long position.

Save as disclosed above, as at the end of the reporting period, as far as the Directors are aware, none of the Directors and chief executive had any other interests, long positions or short positions in the shares, underlying shares or debentures of the Company or any of its associated corporations.

Substantial Shareholders' Interests

As at 31 December 2022, save for the Directors or chief executives as disclosed above, the following persons have an interest or short position in the shares or the underlying shares or debentures of the Company and its associated corporations which are required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or, which were recorded in the register required to be kept under Section 336 of the SFO:

(a) Interests in the Company

Substantial shareholders' name	Nature of interests and capacity	Ordinary shares	Approximate attributable interest (%)
Yu Yumei[1]	Spousal interest[2]	781,558,000 (L)	28.06
THCL[1]	Beneficial owner	774,758,000 (L)	27.82
Niu Qiu Ping	Spousal interest[5]	682,426,521 (L)	24.50
Sky Greenfield Investment Limited	Beneficial owner[3]	636,994,521 (L)	22.87
	Interests of controlled corporations[4]	43,932,000 (L)	1.58
			24.45

(L) Represents long position.

Notes:

(1) THCL is owned as to 89.02% by Mr. Zhu Xiaokun and 10.98% by his spouse, Madam Yu Yumei.

(2) Ms. Yu Yumei is the spouse of Mr. Zhu Xiaokun and is deemed to be interested in the shares of the Company held by Mr. Zhu Xiaokun. For information in relation to shares of the Company held by Mr. Zhu Xiaokun, please refer to the paragraph headed "Directors' Interests and Short Positions in Shares, Underlying Shares and Debentures — (a) Interests in the Company".

(3) Zhu Zefeng controlled 100% of Sky Greenfield Investment Limited.

(4) Silver Power (HK) Limited, which was wholly owned by Sky Greenfield Investment Limited, held 43,932,000 ordinary shares.

(5) Ms. Niu Qiu Ping is the spouse of Mr. Zhu Zefeng and is deemed to be interested in the shares of the Company held by Mr. Zhu Zefeng.

(b) Interests in the shares of associated corporation

Substantial shareholder's name	Name of associated corporation	Nature of interests and capacity	Total number of shares	Approximate percentage of interests (%)
Ms. Yu Yumei	THCL	Beneficial owner	5,489 (L)	10.98
		Spousal interest(1)	44,511 (L)	89.02
Ms. Yu Yumei	TG Tech	Spousal interest(1)	14,483,951 (L)	2.47

(L) Represents long position.

Note:

(1) Ms. Yu Yumei is the spouse of Mr. Zhu Xiaokun and is deemed to be interested in the shares of the associated corporations of the Company held by Mr. Zhu Xiaokun. For information in relation to shares of associated corporations of the Company held by Mr. Zhu Xiaokun, please refer to the paragraph headed "Directors' and Chief Executive's Interests and Short Positions in Shares, Underlying Shares and Debentures – (b) Interests in the shares of associated corporation".

Loan Agreement with Specific Performance Obligation

In accordance with the continuing obligation set out in Rule 13.21 of the Listing Rules, the following are the details of the loan agreement with covenants relating to specific performance on the controlling shareholders of the Company as at the date of this report pursuant to Rule 13.18 of the Listing Rules thereof.

On 5 September 2022, the Company, as a borrower (the "Borrower") entered into a facility agreement (the "Facility Agreement") with a licensed bank in Hong Kong relating to:

— 1-year dividend loan facility amounted to HKD194,114,500; and

— Business card facility amounted to USD300,000

The facilities are unsecured and interest bearing with any outstanding amounts to be repaid in full on the date falling one years from the date of drawdown.

Pursuant to the Facility Agreement, Mr. Zhu Xiaokun and Mr. Zhu Zefeng, the controlling shareholders of the Company, undertake to maintain beneficiary interests (direct and indirect) of no less than 45% shareholdings of the Company as long as the Company has facility at the bank (the "Specific Performance Obligation").

As at the date of this report, Mr. Zhu Xiaokun and Mr. Zhu Zefeng beneficially own approximately 52.47% of the issued share capital of the Company.

Breach of the Specific Performance Obligation may lead to the bank declaring the commitments to be cancelled and/or declaring all outstanding amounts together with interest accrued and all other sums payable by the Company to be immediately due and payable.

Arrangements to Acquire Shares or Debentures

Save as disclosed in this report (note Share Option Scheme below), at no time during the year was the Company or any of its subsidiaries, holding companies or fellow subsidiaries a party to any arrangements to enable a Director to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

Biographical Details of Directors and Senior Management

Brief biographical details of the Directors and the senior management are set out on pages 89 to 91.

Final Dividend and Closure of Register of Members

The register of members of the Company will be closed from 1 June 2023 to 6 June 2023 (both days inclusive), for the purpose of determining shareholders' entitlement to attend and vote at the forthcoming annual general meeting of the Company (the "Annual General Meeting") on 6 June 2023, during which period no transfer of shares of the Company will be registered. In order to qualify for attending and voting at the Annual General Meeting, shareholders should ensure that all transfer documents, accompanied by the relevant share certificates, are lodged with the Company's branch share registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong, for registration by no later than 4:30 p.m. on 31 May 2023.

The Board has resolved on 24 March 2023 to recommend the payment of a final dividend of RMB0.0362 per share for the year ended 31 December 2022 (2021: RMB0.0594) to shareholders of the Company whose names appear on the register of members of the Company on 27 June 2023. The register of members will be closed from 28 June 2023 to 30 June 2023, both days inclusive, and the proposed final dividend is expected to be paid on or before 14 July 2023. The payment of dividends shall be subject to the approval of the shareholders of the Company at the Annual General Meeting expected to be held on 6 June 2023. In order to qualify for the proposed dividend, shareholders of the Company should ensure that all transfer documents, accompanied by the relevant share certificates, are lodged with the Company's branch share registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong, for registration by no later than 4:30 p.m. on 27 June 2023.

Share Scheme

The current share option scheme of the Company was approved by the Company in the annual general meeting held on 26 May 2017 ("Share Option Scheme").

The purpose of the Share Option Scheme is to provide participants with the opportunity to acquire proprietary interests in the Company and to encourage participants to work towards enhancing the value of the Company and its shares for the benefit of the Company and its Shareholders as a whole. The Share Option Scheme will provide the Company with a flexible means of either retaining, incentivising, rewarding, remunerating, compensating and/or providing benefits to participants. The major terms of the Share Option Scheme are as follows:

1. The Directors may, at their discretion, invite any directors (including executive directors, non-executive directors and independent non-executive directors) and employees of any member of the Group and any advisers, consultants, distributors, contractors, contract manufacturers, suppliers, agents, customers, business partners, joint venture business partners, service providers of any member of the Group who the Board considers, in its sole discretion, have contributed or will contribute to the Group (the "Participants") to participate in the Share Option Scheme.

2. The maximum number of shares over which options may be granted under the Share Option Scheme must not exceed 222,008,000 shares of nominal value USD0.0025 each in the capital of the Company. As at the date of this report, options in respect of 162,009,000 shares may be granted, representing approximately 5.8% of the issued share capital of the Company as at the date of this report.

3. The total number of shares of the Company issued and to be issued upon exercise of the options granted to each Participant (including both exercised, cancelled and outstanding options) under the Scheme in any 12 month period must not exceed 1% of the shares in issue. Any further grant of options which would result in the number of shares issued as aforesaid exceeding the said 1% limit must be subject to prior shareholders' approval with the relevant Participant and his associates abstaining from voting.

4. The period within which the options must be exercised will be specified by the Company at the time of grant. This period must expire no later than 10 years from the relevant date of grant (being the date on which the Board resolves to make an offer of option to the relevant grantee).

5. At the time of grant of the options, the Company may specify any minimum period(s) for which an option must be held before it can be exercised. The Scheme does not contain any such minimum period.

6. The amount payable on acceptance of an option is HKD1.00.

7. The subscription price for the shares, the subject of the options, shall be no less than the higher of (i) the closing price of the shares as stated in the daily quotations sheet issued by the Stock Exchange on the date of grant; (ii) the average closing price of the shares as stated in the daily quotations sheets issued by the Stock Exchange for the five Stock Exchange business days immediately preceding the date of grant; and (iii) the nominal value of a share on the date of grant. The subscription price will be established by the Board at the time the option is offered to the Participants.

8. The Share Option Scheme shall be valid and effective till 24 May 2027.

On 11 January 2018, options entitled holders to subscribe for a total of 60,000,000 shares of USD0.0025 each were granted to and accepted by certain Directors, employees and consultants of the Company in respect of their services to the Group. 50% of these share options would be vested on 31 March 2019 if the consolidated audited net profit of the Company for the year ended 31 December 2018 represented an increase of 50% or more as compared to that of the year ended 31 December 2017. The remaining 50% of these share options would be vested on 31 March 2020 if the consolidated audited net profit of the Company for the year ending 31 December 2019 represented an increase of 50% or more as compared to that of the year ended 31 December 2018. All these options have an initial exercise price of HKD1.50 per share of USD0.0025 each and an exercise period commencing from the relevant vesting date and ending on 31 December of the same year as the vesting date. The closing price of the Company's shares at the date of grant was HKD1.29 per share of USD0.0025 each.

Among these 60,000,000 share options, 30,000,000 share options were vested on 31 March 2019. All share options for 30,000,000 shares were exercised between 29 August 2019 to 27 December 2019.

The remaining 30,000,000 shares were vested on 31 March 2020. All share options for these 30,000,000 shares were exercised between 23 November 2020 to 30 December 2020.

There were no share options granted since the last grant of options on 11 January 2018 and up till 31 December 2022 and therefore, there were no outstanding share options during the year ended 31 December 2022.

Information on the accounting policy for share options granted is provided in note 3(p)(ii) to the financial statements respectively.

During the year ended 31 December 2022, the Company did not have any share award scheme in place.

Apart from the foregoing, at no time during the year was the Company, or any of its holding company or subsidiaries a party to any arrangement to enable the Directors to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

Directors' and Controlling Shareholders' Interests in Contracts

Save as disclosed under the heading "Connected Transactions/Continuing Connected Transactions" below and "Material related party transactions" in note 36 to the financial statements, there is no contract of significance to the business of the Group between the Company, or any of its subsidiary companies, or a controlling shareholder or any of its subsidiaries during the year. During the year, no contract of significance for the provision of services to the Group by a controlling shareholder or any of its subsidiaries was made. There is no transaction, arrangement or contract of significance to the Group subsisting during or at the end of the year in which any Director or any entity connected with a Director is or was materially interested, either directly or indirectly.

Directors' Service Contracts

No Director proposed for re-election at the forthcoming annual general meeting has a service contract with the Company or any of its subsidiaries, which is not determinable by the employing company within one year without payment of compensation (other than statutory compensation).

Permitted indemnity provision

During the year ended 31 December 2022, there was no permitted indemnity provision in force for the benefit of one or more (existing or former) directors of the Company or of its associated companies or such directors' associated companies.

Purchase, Sales or Redemption of Shares

During the year ended 31 December 2022, the Company repurchased 10,000,000 shares in total, at an aggregate consideration of HKD32,015,060 (equivalent to approximately RMB26,018,000) on the Stock Exchange. The shares repurchased were cancelled on 13 May 2022. Details of the repurchases of such ordinary shares were as follows:

Month of repurchase	No. of ordinary shares repurchased	Price per ordinary shares Highest (HKD)	Price per ordinary shares Lowest (HKD)	Aggregate consideration paid (HKD)
March 2022	1,648,000	3.20	3.06	5,176,020
April 2022	8,352,000	3.43	2.98	26,839,040
	10,000,000			32,015,060

Save as disclosed, during the year ended 31 December 2022, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of its listed securities.

Issue of Shares or Debentures

Save as disclosed in this annual report, during the year ended 31 December 2022, neither the Company nor any of its subsidiaries has issued any shares or debentures.

Corporate Governance

The Company has, so far where applicable, adopted and complied with the principles and code provisions set out in the Corporate Governance Code (the "CG Code") in Appendix 14 of the Listing Rules during the year ended 31 December 2022, except for the following deviation:

Code Provision C.1.6

Code provision C.1.6 of the CG Code stipulates that independent non-executive directors ("INEDs") and other non-executive directors should also attend general meetings. INED, Mr. Gao Xiang, was unable to attend the annual general meeting of the Company held on 2 June 2022 due to the COVID-19 pandemic.

Audit Committee

The Audit Committee comprises three INEDs. The Audit Committee held a meeting on 23 March 2023 to consider and review the 2022 annual report and annual financial statements of the Group and to give their opinion and recommendation to the Board. The Audit Committee considered that the 2022 annual report and annual financial statements of the Company have complied with the applicable accounting standards and the Company has made appropriate disclosure thereof.

Defined contribution pension funds

The Group participates in defined contribution pension funds managed by the PRC local government authorities as disclosed in note 8(b) to the financial statements.

The PRC subsidiaries of the Group participate in defined contribution retirement benefit schemes (the "Schemes") organised by the PRC municipal and provincial government authorities whereby the PRC subsidiaries are required to make contributions at the rate of 19% starting from 1 July 2016 (before 1 July 2016: 20%) of the eligible employees' salary rate to the Schemes. The Group has accrued for the required contributions which are remitted to the respective local government authorities when the contributions become due. The local government authorities are responsible for the pension obligations payable to the retired employees covered under the Schemes.

Forfeited contributions could not be used by the Group to reduce the existing level of contributions.

Major Customers and Suppliers

The information in respect of the Group's sales and purchases attributable to major customers and suppliers during the financial year ended 31 December 2022 is as follows:

	Percentage of the Group's total	
	Sales	Purchases
The largest customer/supplier	6%	30%
Five largest customers/suppliers in aggregate	22%	54%

At no time during the year had the Directors, their close associates or any shareholder of the Company (which to the knowledge of the Directors owns more than 5% of the Company's share capital) had any interest in these major customers and suppliers.

A majority of the domestic customers were granted credit for a term of 90 days, depending on the sales order volumes and the creditworthiness of individual customers. Beyond the normal credit term, a 90-day extension was also granted to key and credit-worthy customers subject to specific approval from management.

Overseas customers were generally granted Letter of Credit ("L/C") of 90 days, and a longer term-up L/C up to 120 days was allowed to customers with steady and high sales volumes.

The Group accepted bills from customers as settlement of trade receivables. The maturity period of bills ranges from three to twelve months.

Connected Transactions/Continuing Connected Transactions

On 19 August 2022, Precision Tools, a wholly-owned subsidiary of the Company, entered into an equity interest transfer agreement with Smart Rich Industrial Limited (駿發實業有限公司) (a Company which is wholly-owned by Mr. Zhu Zefeng, who is a substantial shareholder of the Company), pursuant to which Precision Tools acquired the entire equity interest of Tianguan Precision at a total consideration of RMB276,000,000. For further details, please refer to the Company's announcement published on 19 August 2022.

Save for the above, there were no other connected transactions or continuing connected transactions of the Company which are subject to any of the reporting, announcement or independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

Details of the related party transactions of the Group during the reporting period are set out in note 36 to the consolidated financial statements in this report. These related party transactions either fall outside the definitions of "connected transaction" or "continuing connected transaction" in Chapter 14A of the Listing Rules or are "connected transactions" fully exempt from the reporting, announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

The independent non-executive Directors have reviewed the continuing connected transactions and confirmed that they have been entered into in the ordinary and usual course of business of the Group on normal commercial terms and according to the agreement governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pledge of Assets

As at 31 December 2022, the Group pledged certain bank deposits amounting to approximately RMB140,041,000 (31 December 2021: RMB244,191,000) and certain trade receivables amounting to approximately RMB145,131,000 (31 December 2021: RMB175,195,000).

Financial Information Summary

A summary of the published results and assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the audited financial statements, is set out on page 220. This summary does not form part of the audited financial statements.

Directors' Interests in Competing Business

During the year and up to the date of this annual report, none of the Directors are considered to have interests in any business which competes or is likely to compete, either directly or indirectly, with the businesses of the Group, pursuant to the Listing Rules.

Management Contracts

No contracts concerning the management and/or administration of the whole or any substantial part of the business of the Company were entered into or existed during the year.

Sufficiency of Public Float

Based on the information that is publicly available to the Company and within the knowledge of the Directors of the Company, as at the date of this annual report, the Company has maintained sufficient public float as required under the Listing Rules.

Auditors

KPMG will retire and, being eligible, will offer themselves for re-appointment. A resolution for the re-appointment of KPMG as auditors of the Company is to be proposed at the forthcoming Annual General Meeting. There has been no change in the Company's auditors in any of the preceding three years.

Tax Relief and Exemption

The Company is not aware of any tax relief and exemption available to the shareholders by reason of their holding of the Company's securities. If the shareholders are unsure about the taxation implications of purchasing, holdings, disposing of, dealing in, or the exercise of any rights in relation to the Company's shares, they are advised to consult an expert.

By order of the Board

Tiangong International Company Limited
Zhu Xiaokun
Chairman
Hong Kong, 24 March 2023

Independent auditor's report to the shareholders of
Tiangong International Company Limited
(Incorporated in the Cayman Islands with limited liability)

Opinion

We have audited the consolidated financial statements of Tiangong International Company Limited ("the Company") and its subsidiaries ("the Group") set out on pages 124 to 219, which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statement of profit or loss, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code") together with any ethical requirements that are relevant to our audit of the consolidated financial statements in the Cayman Islands, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Revenue recognition

Refer to Note 5 to the consolidated financial statements and the accounting policies on pages 150 to 151.

The Key Audit Matter	How the matter was addressed in our audit
The Group's revenue principally comprises sales of die steel, high speed steel, cutting tools and titanium alloy products to distributors and manufacturers. Contracts for different products with different types of customers have a variety of different terms. Such terms may affect the timing of the recognition of sales to these customers. Management evaluates the terms of each contract in order to determine the appropriate timing of revenue recognition. Revenue from domestic and overseas sales is recognised when the control of the goods have been transferred to customers, which is generally when the goods leave the Group's warehouses, when the goods are delivered at the customers' premises and when the goods are loaded on board, respectively in accordance with the terms of the sales contracts.	Our audit procedures to assess the recognition of revenue included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls in relation to revenue recognition; • inspecting key customer contracts to identify performance obligations and terms and conditions relating to transfer of control of the goods and assessing the Group's timing of recognition of revenue with reference to the requirements of the prevailing accounting standards; • comparing revenue transactions recorded during the current year, on a sample basis, with invoices, sales contracts and other underlying documents to assess whether the related revenue was recognised in accordance with the Group's revenue recognition accounting policies; • comparing, on a sample basis, specific revenue transactions recorded before and after the financial year end date with underlying documentation, which includes goods delivery notes, goods acceptance notes and customs declaration forms, to assess whether revenue had been recognised in accordance with the terms of the sales contracts and in the correct financial year;

Revenue recognition (continued)

Refer to Note 5 to the consolidated financial statements and the accounting policies on pages 150 to 151.

The Key Audit Matter	How the matter was addressed in our audit
We identified the recognition of revenue as a key audit matter because revenue is one of the key performance indicators of the Group and is, therefore, subject to an inherent risk of manipulation by management to meet targets or expectations.	• inspecting underlying documentation for manual journal entries relating to revenue which were recorded during the year and the closing period and which met specific risk-based criteria; • confirming, on a sample basis, the value of sales transactions for the year ended 31 December 2022 directly with customers and inspecting underlying documentation relating to reconciling differences between the transactions confirmed by customers and the Group's accounting records to assess whether the related revenue had been recognised in the correct financial year; and • inquiring of management as to the reasons for sales credits issued subsequent to the year end and inspecting relevant underlying documentation in order to assess whether the sales credits were completely and accurately accounted for in the correct financial year.

Expected credit loss allowances for trade receivables

Refer to Note 24 to the consolidated financial statements and the accounting policies on pages 141 to 145.

The Key Audit Matter	How the matter was addressed in our audit
As at 31 December 2022, the gross amount of the Group's trade receivables totalled RMB1,698 million, against which a loss allowance of RMB112 million for expected credit losses (ECLs) was made. The carrying value of the Group's trade receivables represented approximately 12% of the total assets as at 31 December 2022. Management measures the loss allowance at an amount equal to lifetime ECLs based on estimated loss rates for each category of trade receivables grouped according to the shared credit risk characteristics. The estimated loss rates take into account the ageing of trade receivable balances, the repayment history of the Group's customers, current market conditions, customer-specific conditions, and forward-looking information. Such assessment involves significant management judgement and estimation. We identified the expected credit loss allowance for trade receivables as a key audit matter because determining the level of the loss allowance requires the exercise of significant management judgement which is inherently subjective.	Our audit procedures to assess the expected credit loss allowance for trade receivables included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of key internal controls relating to credit control, debt collection and estimating the credit loss allowance; • evaluating the Group's policy for estimating the credit loss allowance with reference to the requirements of the prevailing accounting standard; • assessing whether items in the trade receivables ageing report were categorised in the appropriate ageing bracket by comparing individual items therein with sales invoices and other relevant underlying documentation, on a sample basis; • obtaining an understanding of the key parameters and assumptions of the expected credit loss model adopted by management, including the basis of segmentation of the trade receivables based on shared credit risk characteristics of customers in management's estimated loss rates; • assessing the appropriateness of management's estimates of loss allowance by examining the information used by management to derive such estimates, including testing the accuracy of the historical default data and evaluating whether the historical loss rates are appropriately adjusted based on current market conditions, customer-specific conditions and forward-looking information; and • re-performing the calculation of the loss allowance as at 31 December 2022 based on the Group's credit loss allowance policies.

Valuation of inventories

Refer to Note 23 to the consolidated financial statements and the accounting policies on page 145.

The Key Audit Matter	How the matter was addressed in our audit
At 31 December 2022, the Group's gross inventories totalled RMB2,645 million, against which provisions for inventories of RMB62 million were recorded. The Group's inventories are valued at the lower of cost and net realisable value. The Group's provisions for inventories to write down the cost of inventories to their net realisable value is determined by management on an individual item basis by taking into account the estimated selling prices of the Group's products, the estimated costs of completion of work-in-progress at the reporting date and the estimated costs necessary to make the sales. The selling prices of the Group's special steel products are subject to market price volatility of the main raw materials, which include steel and alloys. Certain steel products are produced to meet the specific needs of downstream customers, the demand for which may change significantly from time to time. We identified the valuation of inventories as a key audit matter because of the significant management judgment involved in assessing the level of provisions for inventories, particularly in respect of slow moving inventories and inventories where the net realisable value may be less than the recorded cost.	Our audit procedures to assess the valuation of inventories included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls over making provisions for inventories; • assessing the assumptions and estimates made by management in making provisions for inventories by performing a retrospective review of the historical accuracy of these estimates, discussing any significant variances with management and considering the impact of these variances on the current year's assumptions and estimates; • evaluating whether items were correctly categorised in the finished goods inventory ageing report by comparison with production records, on a sample basis; • recalculating the Group's inventory provision with reference to the sales prices achieved after the year end date, where available, and the latest market prices for the Group's products; • comparing year end inventory levels of individual products, on a sample basis, with sales plans agreed with customers in order to assess the residual risk of the inventories' realisability; and • inspecting the inventory ageing report and observing the condition of inventory during our attendance at the year-end inventory count to identify any slow moving and obsolete inventory items and critically assessing whether appropriate provisions have been established for slow moving and obsolete items, for which there has been a lack of recent sales transactions.

Information other than the consolidated financial statements and auditor's report thereon

The directors are responsible for the other information. The other information comprises all the information included in the annual report, other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the consolidated financial statements

The directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Yue Tat Wai.

KPMG
Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong

24 March 2023

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Revenue	5	**5,066,807**	5,744,873
Cost of sales		**(3,918,320)**	(4,339,675)
Gross profit		**1,148,487**	1,405,198
Other income	6	**157,895**	129,387
Distribution costs		**(219,776)**	(217,737)
Administrative expenses		**(146,666)**	(134,575)
Research and development costs		**(288,456)**	(273,821)
Other operating expenses	7	**(31,947)**	(47,274)
Profit from operations		**619,537**	861,178
Finance income		**46,294**	27,563
Finance expenses		**(176,189)**	(159,047)
Net finance costs	8(a)	**(129,895)**	(131,484)
Share of profits less losses of associates	19	**16,470**	12,543
Share of profits less losses of joint ventures	20	**13,248**	9,418
Profit before taxation	8	**519,360**	751,655
Income tax	9	**4,750**	(80,025)
Profit for the year		**524,110**	671,630
Attributable to:			
Equity shareholders of the Company		**503,535**	664,371
Non-controlling interests		**20,575**	7,259
Profit for the year		**524,110**	671,630
Earnings per share (RMB)	13		
Basic and diluted		**0.181**	0.244

The notes on pages 132 to 219 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in Note 33(b).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Profit for the year		**524,110**	671,630
Other comprehensive income for the year (after tax adjustment)	12		
Items that will not be reclassified to profit or loss:			
Equity investments at fair value through other comprehensive income (FVOCI) — net movement in fair value reserve (non-recycling) (inclusive of tax effect of Renminbi ("RMB") 2,720,000 (2021: RMB1,696,000))		**(22,806)**	24,430
Items that may be reclassified subsequently to profit or loss:			
Exchange differences on translation of:			
— financial statements of entities with functional currencies other than RMB (inclusive of nil tax (2021: nil))		**(57,915)**	(12,086)
Other comprehensive income for the year		**(80,721)**	12,344
Total comprehensive income for the year		**443,389**	683,974
Attributable to:			
Equity shareholders of the Company		**422,697**	676,701
Non-controlling interests		**20,692**	7,273
Total comprehensive income for the year		**443,389**	683,974

The notes on pages 132 to 219 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Non-current assets			
Property, plant and equipment	14	**4,607,596**	4,273,366
Lease prepayments	15	**233,842**	163,214
Intangible assets	16	**65,333**	16,942
Goodwill	17	**144,600**	21,959
Interest in associates	19	**95,473**	61,814
Interest in joint ventures	20	**47,669**	38,699
Other financial assets	21	**189,694**	185,310
Deferred tax assets	32(b)	**60,007**	42,209
		5,444,214	4,803,513
Current assets			
Financial assets measured at fair value through profit or loss (FVPL)	22	**1,041**	1,651
Inventories	23	**2,583,470**	2,277,610
Trade and other receivables	24	**2,632,708**	2,131,259
Pledged deposits	25	**140,041**	244,191
Time deposits	26	**1,341,834**	1,749,481
Cash and cash equivalents	27	**1,219,843**	1,356,881
		7,918,937	7,761,073
Current liabilities			
Trade and other payables	28	**1,659,779**	1,373,841
Interest-bearing borrowings	29	**1,866,813**	1,600,786
Other financial liability	31	**1,524,650**	1,468,050
Current taxation	32(a)	**28,240**	40,955
		5,079,482	4,483,632
Net current assets		**2,839,455**	3,277,441
Total assets less current liabilities		**8,283,669**	8,080,954

As at 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Non-current liabilities			
Interest-bearing borrowings	29	**1,028,500**	1,038,000
Deferred income	30	**42,530**	50,306
Deferred tax liabilities	32(c)	**71,306**	100,091
		1,142,336	1,188,397
NET ASSETS		**7,141,333**	6,892,557
CAPITAL AND RESERVES			
Share capital	33(d)	**49,231**	49,399
Reserves		**6,811,053**	6,580,846
Total equity attributable to equity shareholders of the Company		**6,860,284**	6,630,245
Non-controlling interests		**281,049**	262,312
TOTAL EQUITY		**7,141,333**	6,892,557

Approved and authorised for issue by the board of directors on 24 March 2023.

Zhu Xiaokun	**Yan Ronghua**
Directors	*Directors*

The notes on pages 132 to 219 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2022 (Expressed in Renminbi)

		Attributable to equity shareholders of the Company										
	Note	Share capital RMB'000	Share premium RMB'000	Capital redemption reserve RMB'000	Capital reserve RMB'000	Merger reserve RMB'000	Exchange reserve RMB'000	Fair value reserve (non-recycling) RMB'000	PRC statutory reserve RMB'000	Retained earnings RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 31 December 2021 and 1 January 2022		49,399	2,753,838	564	61,524	91,925	(64,032)	68,282	930,561	2,738,184	262,312	6,892,557
Changes in equity for 2022:												
Profit for the year		–	–	–	–	–	–	–	–	503,535	20,575	524,110
Other comprehensive income	12	–	–	–	–	–	(57,910)	(22,928)	–	–	117	(80,721)
Total comprehensive income		–	–	–	–	–	(57,910)	(22,928)	–	503,535	20,692	443,389
Dividends approved in respect of the previous year	33(b)(ii)	–	–	–	–	–	–	–	–	(165,429)	–	(165,429)
Dividends of a subsidiary		–	–	–	–	–	–	–	–	–	(15,234)	(15,234)
Transfer to reserve	33(e)(vi)	–	–	–	–	–	–	–	73,311	(73,311)	–	–
Capital injection by non-controlling shareholders		–	–	–	–	–	–	–	–	–	19,626	19,626
Acquisition of non-controlling interests		–	–	–	(1,211)	–	–	–	–	–	(6,347)	(7,558)
Repurchase of own shares	33(c)	(168)	(26,018)	168	–	–	–	–	–	–	–	(26,018)
Balance at 31 December 2022		49,231	2,727,820	732	60,313	91,925	(121,942)	45,354	1,003,872	3,002,979	281,049	7,141,333

The notes on pages 132 to 219 form part of these financial statements.

For the year ended 31 December 2021 (Expressed in Renminbi)

		Attributable to equity shareholders of the Company										
	Note	Share capital RMB'000	Share premium RMB'000	Capital redemption reserve RMB'000	Capital reserve RMB'000	Merger reserve RMB'000	Exchange reserve RMB'000	Fair value reserve (non-recycling) RMB'000	PRC statutory reserve RMB'000	Retained earnings RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 31 December 2020 and 1 January 2021		46,186	2,066,883	564	61,524	91,925	(52,017)	53,570	837,422	2,364,167	170,085	5,640,309
Changes in equity for 2021												
Profit for the year		–	–	–	–	–	–	–	–	664,371	7,259	671,630
Other comprehensive income	12	–	–	–	–	–	(12,015)	24,345	–	–	14	12,344
Total comprehensive income		–	–	–	–	–	(12,015)	24,345	–	664,371	7,273	683,974
Dividends approved in respect of the previous year	33(b)(ii)	–	–	–	–	–	–	–	–	(206,848)	–	(206,848)
Transfer to reserve	33(e)(vi)	–	–	–	–	–	–	–	93,341	(93,341)	–	–
Placing and subscription of shares	33(d)(ii)	3,213	686,955	–	–	–	–	–	–	–	–	690,168
Liquidation of a subsidiary		–	–	–	–	–	–	–	(202)	202	–	–
Disposal of equity investments at fair value through other comprehensive income		–	–	–	–	–	–	(9,633)	–	9,633	–	–
Capital injection by non-controlling shareholders	31	–	–	–	–	–	–	–	–	–	85,000	85,000
Acquisition of non-controlling interests		–	–	–	–	–	–	–	–	–	(46)	(46)
Balance at 31 December 2021		49,399	2,753,838	564	61,524	91,925	(64,032)	68,282	930,561	2,738,184	262,312	6,892,557

The notes on pages 132 to 219 form part of these financial statements.

CONSOLIDATED CASH FLOW STATEMENT

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Operating activities			
Cash generated from operations	27(b)	**368,618**	642,793
Tax paid		**(65,065)**	(100,493)
Net cash generated from operating activities		**303,553**	542,300
Investing activities			
Payment for purchase of property, plant and equipment		**(496,301)**	(453,465)
Payment for purchase of lease prepayments		**(40,682)**	(19,055)
Payment for purchase of other financial assets		**(25,000)**	(27,154)
Proceeds from disposal of other financial assets		**–**	11,890
Acquisition of subsidiaries, net of cash acquired	27(e)	**(260,453)**	–
Proceeds/(payment) from time and pledged deposits, net		**511,797**	(1,258,972)
Interest received	8(a)	**46,294**	27,563
Dividends received from associates		**4,245**	10,111
Dividends received from other financial assets	6	**9,232**	5,077
Payment for interest in associates		**(23,000)**	(7,500)
Payment for purchase of trading securities		**–**	(510)
Proceeds from disposal of trading securities		**–**	22,010
Proceeds for structured deposits, net		**–**	850,000
Proceeds from gains on structured deposits		**2,579**	29,081
Net cash used in investing activities		**(271,289)**	(810,924)

The notes on pages 132 to 219 form part of these financial statements.

For the year ended 31 December 2022 (Expressed in Renminbi)

	Note	2022 RMB'000	2021 RMB'000
Financing activities			
Proceeds from interest-bearing borrowings	27(c)	**3,352,797**	4,480,470
Repayment of interest-bearing borrowings	27(c)	**(3,225,488)**	(5,207,503)
Proceeds from contingent redeemable capital contributions in a subsidiary	31	**–**	1,065,000
Interest paid		**(119,104)**	(106,728)
Capital contribution from non-controlling shareholders		**19,626**	85,000
Dividends paid to equity shareholders of the Company	33(b)(ii)	**(165,429)**	(206,848)
Dividend paid to non-controlling shareholders		**(15,234)**	–
Payment for repurchase of shares	33(c)	**(26,018)**	–
Payment for acquisition of non-controlling interests		**(7,558)**	–
Proceeds from placing and subscription	33(d)(ii)	**–**	690,168
Net cash (used in)/generated from financing activities		**(186,408)**	799,559
Net (decrease)/increase in cash and cash equivalents		**(154,144)**	530,935
Cash and cash equivalents at 1 January		**1,356,881**	827,246
Effect of foreign exchange rate changes		**17,106**	(1,300)
Cash and cash equivalents at 31 December	27(a)	**1,219,843**	1,356,881

The notes on pages 132 to 219 form part of these financial statements.

1 Reporting entity

Tiangong International Company Limited (the "Company") was incorporated in the Cayman Islands on 14 August 2006 as an exempted company with limited liability under the Companies Law, Cap 22 (Law 3 of 1961 as consolidated and revised) of the Cayman Islands. The Company's shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") since 26 July 2007.

The Company and its subsidiaries are collectively referred to as the "Group".

2 Basis of preparation

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board ("IASB") and the requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Significant accounting policies adopted by the Group are disclosed in Note 3.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current accounting period of the Group and the Company. Note 2(d) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current accounting periods reflected in these financial statements.

(b) Basis of preparation of the financial statements

The consolidated financial statements of the Group as at and for the year ended 31 December 2022 comprise the Company and its subsidiaries and the Group's interests in associates and joint ventures.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets and liabilities are stated at their fair value as explained in the accounting policies set out below.

— other freehold land and buildings, including interests in leasehold land and buildings where the group is the registered owner of the property interest (see Note 3(e)); and

— investments in equity securities (see Note 3(d))

2 Basis of preparation (continued)

(c) Accounting estimates and judgements

The preparation of financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are set out in Note 4.

(d) Changes in accounting policies

The IASB has issued the following amendments to IFRSs that are first effective for the current accounting period of the Group:

- Amendment to IFRS 16, *Property, plant and equipment: Proceeds before intended use*

- Amendments to IFRS 37, *Provisions, contingent liabilities and contingent assets: Onerous contracts — cost of fulfilling a contract*

None of these developments had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented in this interim financial report. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

3 Significant accounting policies

(a) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-Group balances, transactions and cash flows and any unrealised profits arising from intra-Group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-Group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated statement of financial position in accordance with Notes 3(l) or (m) depending on the nature of the liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see Note 3(d)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (see Note 3(b)).

In the Company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see Note 3(h)), unless the investment is classified as held for sale (or included in a disposal Group that is classified as held for sale).

3 Significant accounting policies (continued)

(b) Associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal Group that is classified as held for sale). Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of the Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see Notes 3(c) and (h)(ii)). At each reporting date, the Group assesses whether there is any objective evidence that the investment is impaired. Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with any other long-term interests that in substance form part of the Group's net investment in the associate or the joint venture (after applying the expected credit loss (ECL) model to such other long-term interests where applicable (see Note 3(h)(i)).

Unrealised profits and losses resulting from transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

In all other cases, when the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see Note 3(d)).

3 Significant accounting policies (continued)

(b) Associates and joint ventures (continued)

In the Company's statement of financial position, investments in associates and joint ventures are stated at cost less impairment losses (see Note 3(h)), unless classified as held for sale (or included in a disposal Group that is classified as held for sale).

(c) Goodwill

Goodwill represents the excess of:

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see Note 3(h)).

On disposal of a cash generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

(d) Other investments in equity securities

The Group's policies for investments in equity securities, other than investments in subsidiaries, associates and joint ventures, are as follows:

Investments in equity securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss (FVPL) for which transaction costs are recognised directly in profit or loss. For an explanation of how the Group determines fair value of financial instruments, see Note34(f). These investments are subsequently accounted for as follows, depending on their classification.

3 Significant accounting policies (continued)

(d) Other investments in equity securities (continued)

Equity investments

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an irrevocable election to designate the investment at FVOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in profit or loss as other income in accordance with the policy set out in Note 3(s)(iii).

(e) Property, plant and equipment

Property, plant and equipment is stated at cost (which is, in the case of assets acquired in a business combination, the acquisition date fair value) less accumulated depreciation and impairment losses (see Note 3(h)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see Note 3(u)).

Items may be produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management. The proceeds from selling any such items and the related costs are recognised in profit or loss.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

Depreciation is calculated to write-off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

— Freehold land	not depreciated
— Plant and buildings	20–40 years
— Machinery	10–20 years
— Motor vehicles	8 years
— Office equipment and others	5 years

3 Significant accounting policies (continued)

(e) Property, plant and equipment (continued)

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

Construction in progress represents plant and buildings under construction and equipment pending installation and is stated at cost (which is, in the case of assets acquired in a business combination, the acquisition date fair value) less impairment losses (see Note 3(h)). Cost comprises direct costs of construction as well as interest charges during the year of construction and installation. Capitalisation of these costs ceases and the construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use, notwithstanding any delays in the issue of the relevant commissioning certificates by the relevant authorities in the People's Republic of China (the "PRC").

No depreciation is provided in respect of construction in progress until it is substantially complete and ready for its intended use.

(f) Intangible assets (other than goodwill)

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labour, and an appropriate proportion of overheads and borrowing costs, where applicable (see Note 3(u)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see Note 3(h)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Other intangible assets that are acquired by the Group are stated at cost (the acquisition date fair value) less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see Note 3(h)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

	Estimated useful life
— Patents and trademarks	10 years
— Technical know-how	10 years
— Software	3–10 years

The useful lives of patents are estimated based on the remaining valid period of the patents. The useful lives of technical know-how are estimated based on the period of economic benefits to be derived from the products to be produced relying on the technical know-how.

3 Significant accounting policies (continued)

(f) Intangible assets (other than goodwill) (continued)

Both the period and method of amortisation are reviewed annually.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out above.

(g) Leased assets

Lease prepayments represent cost of land use right paid to the People's Republic of China governmental authorities. Lease prepayments are stated at cost less accumulated amortisation and impairment losses. Amortisation is charged to profit or loss on a straight-line basis over the periods of the rights which are 50 years.

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

(i) As a lessee

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

At the lease commencement date, the Group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily laptops and office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

3 Significant accounting policies (continued)

(g) Leased assets (continued)

(i) As a lessee (continued)

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use asset also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to its present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see Notes 3(e) and 3(h)(ii)).

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("lease modification") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are rent concessions that occurred as a direct consequence of the COVID-19 pandemic and met the conditions set out in paragraph 46B of IFRS 16 Leases. In such cases, the Company has taken advantage of the practical expedient not to assess whether the rent concessions are lease modifications, and recognised the change in consideration as negative variable lease payments in profit or loss in the period in which the event or condition that triggers the rent concessions occurred.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with Note 3(s)(ii).

3 Significant accounting policies (continued)

(h) Credit losses and impairment of assets

(i) Credit losses from financial instruments

The Group recognises a loss allowance for expected credit losses (ECLs) on financial assets measured at amortised cost (including cash and cash equivalents, time deposits, pledged deposits and trade receivables and other receivables) and debt instruments measured at FVOCI (recycling).

Other financial assets measured at fair value, equity securities designated at FVOCI (non-recycling), are not subject to the ECL assessment.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

— fixed-rate financial assets and trade and other receivables: effective interest rate determined at initial recognition or an approximation thereof;

— variable-rate financial assets: current effective interest rate.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

In measuring ECLs, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

ECLs are measured on either of the following bases:

— 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

— lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade receivables are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

3 Significant accounting policies (continued)

(h) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments (continued)

Measurement of ECLs (continued)

For all other financial instruments, the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial instrument assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the Group considers that a default event occurs when (i) the debtor is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or (ii) the financial asset is 90 days past due. The Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

— failure to make payments of principal or interest on their contractually due dates;

— an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);

— an actual or expected significant deterioration in the operating results of the debtor; and

— existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

3 Significant accounting policies (continued)

(h) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments (continued)

Basis of calculation of interest income

Interest income recognised in accordance with Note 3(s)(iv) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the Group assesses whether a financial asset is credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable events:

— significant financial difficulties of the debtor;

— a breach of contract, such as a default or past due event;

— it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;

— significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the asset becomes 5 years past due or when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

3 Significant accounting policies (continued)

(h) Credit losses and impairment of assets (continued)

(ii) Impairment of other non-current assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

— property, plant and equipment;

— lease prepayments (right-of-use assets);

— intangible assets;

— goodwill;

— interest in joint ventures and associates; and

— interest in subsidiaries in the Company's statement of financial position.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, the recoverable amount is estimated annually whether or not there is any indication of impairment.

— *Calculation of recoverable amount*

The recoverable amount of an asset is the greater of its fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit). A portion of the carrying amount of a corporate asset (for example, head office building) is allocated to an individual cash-generating unit if the allocation can be done on a reasonable and consistent basis, or to the smallest group of cash-generating units if otherwise.

— *Recognition of impairment losses*

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to sell, or value in use (if determinable).

3 Significant accounting policies (continued)

(h) Credit losses and impairment of assets (continued)

(ii) Impairment of other non-current assets (continued)

— *Reversals of impairment losses*

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

(iii) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, the Group is required to prepare an interim financial report in compliance with IAS 34, *Interim financial reporting*, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see Notes 3(h)(i) and (ii)).

Impairment losses recognised in an interim period in respect of goodwill are not reversed in a subsequent period. This is the case even if no loss, or a smaller loss, would have been recognised had the impairment been assessed only at the end of the financial year to which the interim period relates.

(i) Inventories

Inventories are assets which are held for sale in the ordinary course of business, in the process of production for such sale or in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

3 Significant accounting policies (continued)

(j) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see Note 3(s)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for expected credit losses (ECLs) in accordance with the policy set out in Note 3(h)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see Note 3(k)).

A contract liability is recognised when the customer pays non-refundable consideration before the Group recognises the related revenue (see Note 3(s)). A contract liability would also be recognised if the Group has an unconditional right to receive non-refundable consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see Note 3(k)).

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see Note 3(s)).

(k) Trade and other receivables

A receivable is recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the Group has an unconditional right to receive consideration, the amount is presented as a contract asset (see Note 3(j)).

Trade receivables that do not contain a significant financing component are initially measured at their transaction price. Trade receivables that contain a significant financing component and other receivables are initially measured at fair value plus transaction costs. All receivables are subsequently stated at amortised cost, using the effective interest method and including an allowance for credit losses (see Note 3(h)(i)). Receivables that are held for collection of contractual cash flows and for selling the financial assets are measured at fair value through other comprehensive income.

(l) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement. Cash and cash equivalents are assessed for expected credit losses (ECLs) in accordance with the policy set out in Note 3(h)(i).

3 Significant accounting policies (continued)

(m) Trade and other payables

Trade and other payables are initially recognised at fair value. Subsequent to initial recognition, trade and other payables are stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at invoice amounts.

(n) Contingent redeemable capital contributions

Contingent redeemable capital contributions are classified as financial liabilities as they are redeemable on a specific date or at the option of the shareholders (including options that are only exercisable in case of triggering events having occurred). The liability is recognised and measured in accordance with the Group's policy for interest-bearing borrowings set out in Note 3(l) and accordingly interests thereon are recognised on an accrual basis in profit or loss as part of finance costs.

(o) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see Note 3(u)).

(p) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Share-based payments

The fair value of share options granted to employees is recognised as an employee cost with a corresponding increase in a capital reserve within equity. The fair value is measured at grant date using the binomial lattice model, taking into account the terms and conditions upon which the options were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the profit or loss for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the capital reserve. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the capital reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the Company's shares. The equity amount is recognised in the capital reserve until either the option is exercised (when it is included in the amount recognised in share capital and share premium for the shares issued) or the option expires (when it is released directly to retained profits).

3 Significant accounting policies (continued)

(q) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria is adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

3 Significant accounting policies (continued)

(q) Income tax (continued)

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividends is recognised.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

— in the case of current tax assets and liabilities, the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

— in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  — the same taxable entity; or

  — different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

(r) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

Provisions are recognised when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, a separate asset is recognised for any expected reimbursement that would be virtually certain. The amount recognised for the reimbursement is limited to the carrying amount of the provision.

3 Significant accounting policies (continued)

(r) Provisions, contingent liabilities and onerous contracts (continued)

(ii) Onerous contracts

An onerous contract exists when the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of fulfilling the contract. The cost of fulfilling the contract includes both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling that contract.

(s) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods in the ordinary course of the Group's business.

Revenue is recognised when control over a product is transferred to the customer, at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

Further details of the Group's revenue and other income recognition policies are as follows:

(i) Sales of goods

Revenue is recognised when the goods are shipped from the Group's warehouses, delivered at the customers' premises, or loaded on board. If the products are a partial fulfilment of a contract covering other goods, then the amount of revenue recognised is an appropriate proportion of the total transaction price under the contract, allocated between all the goods promised under the contract on a relative stand-alone selling price basis.

(ii) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable.

(iii) Dividends

— Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

— Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

3 Significant accounting policies (continued)

(s) Revenue and other income (continued)

(iv) Interest income

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset. For financial assets measured at amortised cost that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e. gross carrying amount net of loss allowance) of the asset (see Note 3(h)(i)).

(v) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. A government grant related to an asset is recognised initially as deferred income and amortised to profit or loss on a straight-line basis over the useful life of the asset.

(t) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss, except those arising from foreign currency borrowings used to hedge a net investment in a foreign operation which are recognised in other comprehensive income.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the Group initially recognises such non-monetary assets or liabilities. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items are translated into RMB at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognised.

3 Significant accounting policies (continued)

(u) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

(v) Business combination

The Group accounts for business combination using the acquisition method when control is transferred to the Group. The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment (see Note 2(h)). Any gain on a bargain purchase is recognised in profit and loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, other contingent consideration is remeasured at fair value at each reporting date and subsequent changes in the fair value of the contingent consideration are recognised in the profit and loss.

(w) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or the Group's parent.

3 Significant accounting policies (continued)

(w) Related parties (continued)

(b) An entity is related to the Group if any of the following conditions applies:

(i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

(x) Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial information provided regularly to the Chairman (the chief operating decision maker) for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

4 Accounting judgements and estimates

Sources of estimation uncertainty

Notes 17 and 34(f) contain information about the assumptions and their risk factors relating to goodwill impairment and fair value of financial instruments. Other significant sources of estimation uncertainty are as follows:

(i) Impairment losses on trade receivables

The Group estimates the amount of loss allowance for ECLs on trade receivables that are measured at amortised cost based on the credit risk of the respective financial instruments. The loss allowance amount is measured as the asset's carrying amount and the present value of estimated future cash flows with the consideration of expected future credit loss of the respective financial instrument. The assessment of the credit risk of the respective financial instrument involves a high degree of estimation and uncertainty. When the actual future cash flows are less than expected or more than expected, a material impairment loss or a material reversal of impairment loss may arise, accordingly.

(ii) Depreciation

Property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives, after taking into account the estimated residual value. The Group reviews annually the useful life of an asset and its residual value, if any. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

(iii) Net realisable value of inventories

Net realisable value of inventories is the estimated selling price in the ordinary course of business, less estimated costs of completion and selling expenses. These estimates are based on current market conditions and historical experience of distributing and selling products of a similar nature. They could change significantly as a result of competitor actions in response to severe industry cycles or other changes in market conditions. Management reassess the estimations at each end of the reporting period.

(iv) Income taxes

Determining income tax provisions involves judgement regarding the future tax treatment of certain transactions. The Group carefully evaluates the tax implications of transactions and tax provisions are set up accordingly. The tax treatment of such transactions is reconsidered periodically to take into account all changes in tax legislation. Deferred tax assets are recognised for temporary deductible differences. As those deferred tax assets can only be recognised to the extent that it is probable that future taxable profit will be available against which the unused tax credits can be utilised, management's judgement is required to assess the probability of future taxable profits. Management's assessment is constantly reviewed and additional deferred tax assets are recognised if it becomes probable that future taxable profits will allow the deferred tax asset to be recovered.

5 Revenue and segment reporting

(a) Revenue

The principal activities of the Group are the manufacturing and sales of high alloy steel, (including die steel ("DS") and high speed steel ("HSS")), cutting tools, titanium alloy, trading of goods and others after eliminating intercompany transactions. Further details regarding the Group's principal activities are disclosed in Note 5(b).

(i) Disaggregation of revenue

Disaggregation of revenue from contracts with customers by products divisions or business lines is as follows:

	2022 **RMB'000**	2021 RMB'000
DS	**2,703,341**	2,391,914
HSS	**964,780**	1,005,436
Cutting tools	**756,726**	1,057,984
Titanium alloy	**362,420**	263,146
Trading of goods	**–**	1,026,393
Others	**279,540**	–
	5,066,807	5,744,873

The Group's revenue from contracts with customers is recognised at a point in time. Disaggregation of revenue from contracts with customers by geographic markets is disclosed in Note 5(b)(iii).

The Group's customer base is diversified and includes nil customer (2021: nil customer) with whom transactions have exceeded 10% of the Group's revenue.

(ii) Revenue expected to be recognised in the future arising from contracts with customers in existence at the reporting date

The Group has applied the practical expedient in paragraph 121 of IFRS 15 to its sales contracts for products such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the contracts for sales of products that had an original expected duration of one year or less.

5 Revenue and segment reporting (continued)

(b) Segment reporting

The Group manages its businesses by divisions, which are organised by a mixture of both business lines (products and services) and geography. In a manner consistent with the way in which information is reported internally to the Chairman (the chief operating decision maker) for the purposes of resource allocation and performance assessment, the Group has presented the following six reportable segments. No operating segments have been aggregated to form the following reportable segments.

— *DS*	The DS segment manufactures and sells materials that are used in the die set manufacturing industry.
— *HSS*	The HSS segment manufactures and sells materials that are used in the tools manufacturing industry.
— *Cutting tools*	The cutting tools segment manufactures and sells HSS and carbide cutting tools to the tooling industry.
— *Titanium alloy*	The titanium alloy segment manufactures and sells titanium alloys to the titanium industry.
— *Trading of goods*	The trading of goods segment sells general carbon steel products that are not within the Group's production scope.
— *Others*	Others segment mainly assembles and sells power tools kits.

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources between segments, the Chairman (the chief operating decision maker) monitors the results, assets and liabilities attributable to each reportable segment on the following basis:

Segment assets include all tangible, intangible assets and current assets with the exception of interest in associates, interest in joint ventures, other financial assets, deferred tax assets, financial assets measured at fair value through profit or loss (FVPL), pledged deposits, time deposits, cash and cash equivalents and other head office and corporate assets. Segment liabilities include trade and other payables and deferred income attributable to the manufacturing and sales activities of the individual segments with the exception of interest-bearing borrowings, other financial liability, current taxation, deferred tax liabilities and other head office and corporate liabilities.

Revenue and expenses are allocated to the reportable segments with reference to revenue generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments.

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities (continued)

The measure used for reporting segment profit is "adjusted EBIT", i.e. "adjusted earnings before interest and taxes", where "interest" is regarded as net finance costs. To arrive at adjusted EBIT, the Group's earnings are further adjusted for items not specifically attributed to individual segments, such as share of profits less losses of associates and joint ventures and other head office or corporate administration costs.

In addition to receiving segment information concerning adjusted EBIT, management is provided with segment information concerning revenue (including inter-segment revenue) generated by the segments in their operations. Inter-segment revenue is priced with reference to prices charged to external parties for similar orders.

Information regarding the Group's reportable segments as provided to the Chairman (the chief operating decision maker) for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below.

	2022					
	DS RMB'000	HSS RMB'000	Cutting tools RMB'000	Titanium alloy RMB'000	Others RMB'000	Total RMB'000
Revenue from external customers	2,703,341	964,780	756,726	362,420	279,540	5,066,807
Inter-segment revenue	–	271,369	–	107	–	271,476
Reportable segment revenue	2,703,341	1,236,149	756,726	362,527	279,540	5,338,283
Reportable segment profit (adjusted EBIT)	207,723	145,163	140,801	72,435	63,368	629,490
Reportable segment assets	5,189,444	2,668,476	1,696,313	596,843	82,780	10,233,856
Reportable segment liabilities	1,008,396	338,051	170,535	137,066	16,353	1,670,401

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities (continued)

	2021					
	DS RMB'000	HSS RMB'000	Cutting tools RMB'000	Titanium alloy RMB'000	Trading of goods RMB'000	Total RMB'000
Revenue from external customers	2,391,914	1,005,436	1,057,984	263,146	1,026,393	5,744,873
Inter-segment revenue	–	304,058	–	–	–	304,058
Reportable segment revenue	2,391,914	1,309,494	1,057,984	263,146	1,026,393	6,048,931
Reportable segment profit (adjusted EBIT)	336,391	312,359	236,846	22,098	306	908,000
Reportable segment assets	4,559,564	2,733,938	1,038,044	495,080	22,000	8,848,626
Reportable segment liabilities	688,833	438,775	206,843	46,361	22,000	1,402,812

(ii) Reconciliations of reportable segment revenue, profit or loss, assets and liabilities

Revenue	**2022 RMB'000**	2021 RMB'000
Reportable segment revenue	**5,338,283**	6,048,931
Elimination of inter-segment revenue	**(271,476)**	(304,058)
Consolidated revenue (Note 5(a))	**5,066,807**	5,744,873

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(ii) Reconciliations of reportable segment revenue, profit or loss, assets and liabilities (continued)

Profit	2022 RMB'000	2021 RMB'000
Reportable segment profit	**629,490**	908,000
Net finance costs	**(129,895)**	(131,484)
Share of profits less losses of associates	**16,470**	12,543
Share of profits less losses of joint ventures	**13,248**	9,418
Unallocated head office and corporate expenses	**(9,953)**	(46,822)
Consolidated profit before taxation	**519,360**	751,655

Assets	2022 RMB'000	2021 RMB'000
Reportable segment assets	**10,233,856**	8,848,626
Interest in associates	**95,473**	61,814
Interest in joint ventures	**47,669**	38,699
Other financial assets	**189,694**	185,310
Deferred tax assets	**60,007**	42,209
Financial assets measured at fair value through profit or loss (FVPL)	**1,041**	1,651
Pledged deposits	**140,041**	244,191
Time deposits	**1,341,834**	1,749,481
Cash and cash equivalents	**1,219,843**	1,356,881
Unallocated head office and corporate assets	**33,693**	35,724
Consolidated total assets	**13,363,151**	12,564,586

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(ii) Reconciliations of reportable segment revenue, profit or loss, assets and liabilities (continued)

Liabilities	2022 RMB'000	2021 RMB'000
Reportable segment liabilities	**1,670,401**	1,402,812
Interest-bearing borrowings	**2,895,313**	2,638,786
Other financial liability	**1,524,650**	1,468,050
Current taxation	**28,240**	40,955
Deferred tax liabilities	**71,306**	100,091
Unallocated head office and corporate liabilities	**31,908**	21,335
Consolidated total liabilities	**6,221,818**	5,672,029

(iii) Geographical information

The following table sets out information about the geographical location of the Group's revenue from external customers. The geographical location of customers is based on the location at which the services were provided or the goods delivered.

Substantially all of the Group's assets and liabilities are located in the PRC and accordingly, no geographical analysis of segment assets and liabilities is provided.

Revenues from external customers	2022 RMB'000	2021 RMB'000
The PRC	**1,951,642**	3,358,645
North America	**1,037,725**	730,852
Europe	**1,301,421**	983,936
Asia (other than the PRC)	**695,123**	582,803
Others	**80,896**	88,637
	5,066,807	5,744,873

6 Other income

	Note	2022 RMB'000	2021 RMB'000
Government grants	(i)	**31,878**	66,017
Sales of scrap materials		**3,218**	4,356
Dividend income	(ii)	**9,232**	5,077
Unrealised fair value changes of other financial assets		**4,910**	11,502
Realised gains on structured deposits		**2,579**	21,492
Net gains on trading securities		**–**	3,816
Net foreign exchange gains		**92,871**	–
Gains from disposal of interest in associates, a joint venture and a subsidiary		**1,927**	1,125
Indemnity income		**–**	5,031
Others		**11,280**	10,971
		157,895	129,387

Note:

(i) The subsidiaries of the Group, located in the PRC collectively received unconditional grants amounting to RMB24,102,000 (2021: RMB58,241,000) from the local government. The Group also recognised amortisation of government grants related to assets of RMB7,776,000 (2021: RMB7,776,000) during the year ended 31 December 2022 (see Note 30).

(ii) The Group received dividends totaling RMB9,232,000 (2021: RMB5,077,000) from listed equity investments, unlisted units in investment funds and trading securities (see Note 21 and 22).

7 Other operating expenses

	2022 RMB'000	2021 RMB'000
Provision for loss allowance on trade and other receivables	**24,645**	5,318
Net losses on disposal of property, plant and equipment	**3,293**	3,002
Net foreign exchange losses	**–**	36,075
Charitable donations	**2,848**	2,610
Net losses on trading securities	**610**	–
Others	**551**	269
	31,947	47,274

8 Profit before taxation

Profit before taxation is arrived at after charging/(crediting):

(a) Net finance costs

	2022 RMB'000	2021 RMB'000
Interest income	**(46,294)**	(27,563)
Finance income	**(46,294)**	(27,563)
Interest on bank loans	**119,589**	113,261
Interest expenses arising on other financial liability	**56,600**	53,050
Less: interest expenses capitalised into property, plant and equipment under construction*	**–**	(7,264)
Finance expenses	**176,189**	159,047
Net finance costs	**129,895**	131,484

* The borrowing costs have been capitalised at a rate of 4.10% per annum in 2021.

(b) Staff costs

	2022 RMB'000	2021 RMB'000
Contributions to defined contribution retirement plans	**25,388**	20,147
Salaries, wages and other benefits	**339,665**	339,922
	365,053	360,069

The Group participates in defined contribution pension funds managed by the PRC local government authorities. According to the respective pension fund regulations, the Group is required to pay annual contributions determined by the respective authorities in the PRC. The Group remits all the pension fund contributions to the respective social security offices, which are responsible for the payments and liabilities relating to the pension funds. The Group has no obligation for payment of retirement and other post-retirement benefits of employees other than the contributions described above.

8 Profit before taxation (continued)

(c) Other items

	Note	2022 RMB'000	2021 RMB'000
Amortisation of intangible assets	16	**3,489**	1,900
Depreciation charge			
— owned property, plant and equipment	14	**324,436**	294,377
— lease prepayments (right-of-use assets)	15	**5,040**	3,417
		329,476	297,794
Net foreign exchange gains/(losses)	6/7	**92,871**	(36,075)
Auditor's remuneration			
— audit services		**6,695**	4,030
— other services		**960**	–
		7,655	4,030
Provision for write-down of inventories	23(b)	**28,257**	2,486
Cost of inventories*	23(b)	**3,918,320**	4,339,675

* Cost of inventories includes amounts relating to staff costs and depreciation and amortisation expenses, which are also included in the respective total amounts disclosed separately above or in Note 8(b) for each of these types of expenses.

9 Income tax in the consolidated statement of profit or loss

(a) Taxation in the consolidated statement of profit or loss represents:

	2022 RMB'000	2021 RMB'000
Current tax		
Provision for PRC Corporate Income Tax (Note 32(a))	**29,543**	72,340
Provision for Hong Kong Profits Tax (Note 32(a))	**20,880**	3,642
Provision for Thailand Corporate Income Tax (Note 32(a))	**996**	1,328
Provision for USA Corporate Income Tax (Note 32(a))	**931**	–
	52,350	77,310
Deferred tax		
Origination and reversal of temporary differences	**(57,100)**	2,715
	(4,750)	80,025

(i) Pursuant to the rules and regulations of the Cayman Islands and British Virgin Islands, the Group is not subject to any income tax in the Cayman Islands or British Virgin Islands.

(ii) The provision for PRC Corporate Income Tax is based on the respective corporate income tax rates applicable to the subsidiaries located in the PRC as determined in accordance with the relevant income tax rules and regulations of the PRC .

Jiangsu Tiangong Tools New Materials Company Limited (formerly known as Jiangsu Tiangong Tools Company Limited) ("TG Tools"), Tiangong Aihe Company Limited ("TG Aihe"), Jiangsu Weijian Tools Technology Company Limited ("Weijian Tools"), Jiangsu Tiangong Technology Company Limited ("TG Tech") and Jiangsu Tiangong Precision Tools Company Limited ("Precision Tools") are subject to a preferential income tax rate of 15% in 2022 available to enterprises which qualify as a High and New Technology Enterprise (2021: 15%).

The statutory corporate income tax rate applicable to the Group's other operating subsidiaries in the PRC is 25% (2021: 25%).

The income tax law of the PRC and its relevant regulations also impose withholding tax at 10%, unless reduced by a tax treaty/arrangement, on dividend distributions made out of the PRC from earnings accumulated from 1 January 2008. Undistributed earnings generated prior to 1 January 2008 are exempted from such withholding tax.

9 Income tax in the consolidated statement of profit or loss (continued)

(a) Taxation in the consolidated statement of profit or loss represents: (continued)

(iii) Pursuant to the income tax rules and regulations of Hong Kong, the Group's subsidiaries in Hong Kong are liable to Hong Kong Profits Tax at a rate of 16.5% (2021: 16.5%) for the year ended 31 December 2022.

(iv) According to the policy of Industrial Promotion Act of Thailand, Tiangong Precision Tools (Thailand) Company Limited ("TGPT"), a subsidiary of the Group located in Thailand, is entitled to a preferential income tax rate of 0% for six years from May 2021, and 20% from May 2027 and thereafter.

Pursuant to the income tax rules and regulations of Thailand, Tiangong Special Steel Company Limited ("TGSS"), a subsidiary of the Group in Thailand are liable to Thailand Corporate Income Tax at a rate of 20% (2021: 20%) for the year ended 31 December 2022.

(v) Pursuant to the income tax rules and regulations of USA, the Group's subsidiary incorporated in the USA is subject to Federal Tax at a rate of 21% and State Profits Tax at a rate of 7%.

(b) Reconciliation between tax expense and accounting profit at applicable tax rates:

	2022 RMB'000	2021 RMB'000
Profit before taxation	**519,360**	751,655
Notional tax on profit before taxation, calculated using the PRC statutory tax rate of 25% (2021: 25%)	**129,840**	187,914
Effect of preferential tax rates	**(9,426)**	(40,455)
Effect of different tax rates	**(18,398)**	(9,351)
Tax effect of non-deductible expenses	**10,148**	8,340
Tax effect of non-taxable income	**(11,273)**	(4,033)
Tax effect of unused tax losses not recognised	**4,929**	2,053
Tax effect of utilisation of previously unrecognised tax losses	**(873)**	(552)
Tax effect of recognition of previously unrecognised temporary difference	**(281)**	(6,176)
Tax effect of temporary differences not recognised	**500**	–
Effect of withholding tax on profit distribution	**(6,625)**	(2,431)
Tax effect of bonus deduction for research and development costs	**(68,941)**	(62,556)
Tax effect of additional deduction for purchase of equipment	**(9,354)**	–
Tax effect of reversal of deferred tax liabilities recognised previously	**(23,004)**	–
(Over)/under-provision in respect of prior year	**(2,137)**	7,252
Others	**145**	20
Actual tax expense	**(4,750)**	80,025

10 Directors' emoluments

Directors' emoluments disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	Directors' fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Contributions to retirement benefit schemes RMB'000	Discretionary bonuses RMB'000	Share-based payments RMB'000	2022 Total RMB'000
Executive directors						
Zhu Xiaokun	–	435	–	460	–	895
Wu Suojun	–	689	8	374	–	1,071
Yan Ronghua	–	526	8	102	–	636
Jiang Guangqing	–	489	8	45	–	542
Independent non-executive directors						
Wang Xuesong	86	–	–	–	–	86
Gao Xiang	36	–	–	–	–	36
Lee Cheuk Yin, Dannis	86	–	–	–	–	86
Total	208	2,139	24	981	–	3,352

	Directors' fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Contributions to retirement benefit schemes RMB'000	Discretionary bonuses RMB'000	Share-based payments RMB'000	2021 Total RMB'000
Executive directors						
Zhu Xiaokun	–	326	–	494	–	820
Wu Suojun	–	563	7	355	–	925
Yan Ronghua	–	474	7	145	–	626
Jiang Guangqing	–	387	7	332	–	726
Independent non-executive directors						
Wang Xuesong	78	–	–	–	–	78
Gao Xiang	36	–	–	–	–	36
Lee Cheuk Yin, Dannis	78	–	–	–	–	78
Total	192	1,750	21	1,326	–	3,289

11 Individuals with highest emoluments

Of the five individuals with the highest emoluments, two (2021: two) are directors whose emoluments are disclosed in Note 10. The aggregate of the emoluments in respect of the other three (2021: three) individuals are as follows:

	2022 **RMB'000**	2021 RMB'000
Salaries, allowances and benefits in kind	**1,892**	1,908
Discretionary bonuses	**1,227**	1,105
Contributions to retirement benefit schemes	**32**	22
	3,151	3,035

The emoluments of the three (2021: three) individuals with the highest emoluments are within the following bands:

	2022 **Number of individuals**	2021 Number of individuals
Hong Kong dollar (HKD) nil to HKD1,000,000	**1**	–
HKD1,000,001 to HKD1,500,000	**2**	3

12 Other comprehensive income

Tax effects relating to each component of other comprehensive income

	Equity investments at FVOCI — net movement in fair value reserves (non-recycling) RMB'000	Exchange differences on translation of financial statements RMB'000	Total RMB'000
For the year ended 31 December 2022			
Before-tax amount	**(25,526)**	**(57,915)**	**(83,441)**
Tax expense	**2,720**	**–**	**2,720**
Net-of-tax amount	**(22,806)**	**(57,915)**	**(80,721)**
For the year ended 31 December 2021			
Before-tax amount	22,734	(12,086)	10,648
Tax expense	1,696	–	1,696
Net-of-tax amount	24,430	(12,086)	12,344

13 Earnings per share

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB503,535,000 (2021: RMB664,371,000) and the weighted average of 2,787,658,500 ordinary shares (2021: 2,723,021,978 ordinary shares) in issue during the year, calculated as follows:

Weighted average number of ordinary shares

	2022	2021
Issued ordinary shares at 1 January	**2,795,000,000**	2,595,000,000
Effect of placing and subscription of shares	**–**	128,021,978
Effect of repurchase of own shares	**(7,341,500)**	–
Weighted average number of ordinary shares at 31 December	**2,787,658,500**	2,723,021,978

(b) Diluted earnings per share

The diluted earnings per share for 2022 and 2021 are the same as the basic earnings per share as there are no dilutive potential ordinary shares during the years.

14 Property, plant and equipment

	Freehold land RMB'000	Plant and buildings RMB'000	Machinery RMB'000	Motor vehicles RMB'000	Office equipment and others RMB'000	Construction in progress RMB'000	Total RMB'000
Cost:							
Balance at 1 January 2021	15,239	1,067,189	4,570,996	8,049	52,165	456,348	6,169,986
Additions	51	4,323	140,530	3,255	2,123	303,183	453,465
Transfers	–	122,432	438,384	–	10,712	(571,528)	–
Disposals	–	(6,980)	(6,046)	–	–	(8,134)	(21,160)
Exchange adjustment	(1,870)	(5,425)	(2,404)	(53)	(30)	(1,428)	(11,210)
Balance at 31 December 2021	13,420	1,181,539	5,141,460	11,251	64,970	178,441	6,591,081
Business combination (Note 38)	–	2,229	768	–	8	169,288	172,293
Additions	–	4,598	96,757	1,120	7,113	386,713	496,301
Transfers	–	120,534	222,908	103	5,109	(348,654)	–
Disposals	–	(17,619)	(9,708)	–	(707)	–	(28,034)
Reclassification	–	28,153	(28,337)	(142)	326	–	–
Transfer to intangible assets (Note 16)	–	–	–	–	(13,819)	–	(13,819)
Exchange adjustment	716	2,371	2,997	33	52	155	6,324
Balance at 31 December 2022	14,136	1,321,805	5,426,845	12,365	63,052	385,943	7,224,146
Accumulated depreciation:							
Balance at 1 January 2021	–	(388,366)	(1,603,926)	(3,797)	(37,351)	–	(2,033,440)
Charge for the year	–	(34,431)	(254,465)	(1,446)	(4,035)	–	(294,377)
Written back on disposals	–	6,520	3,281	–	–	–	9,801
Exchange adjustment	–	36	251	9	5	–	301
Balance at 31 December 2021	–	(416,241)	(1,854,859)	(5,234)	(41,381)	–	(2,317,715)
Business combination (Note 38)	–	–	(36)	–	(3)	–	(39)
Charge for the year	–	(38,021)	(278,948)	(1,715)	(5,752)	–	(324,436)
Written back on disposals	–	12,133	7,645	–	214	–	19,992
Reclassification	–	(2,522)	2,522	–	–	–	–
Transfer to intangible assets (Note 16)	–	–	–	–	6,439	–	6,439
Exchange adjustment	–	(86)	(683)	(11)	(11)	–	(791)
Balance at 31 December 2022	–	(444,737)	(2,124,359)	(6,960)	(40,494)	–	(2,616,550)
Net book value:							
At 31 December 2022	14,136	877,068	3,302,486	5,405	22,558	385,943	4,607,596
At 31 December 2021	13,420	765,298	3,286,601	6,017	23,589	178,441	4,273,366

15 Lease prepayments

	RMB'000
Cost:	
At 1 January 2021	173,980
Additions	19,055
At 31 December 2021	193,035
Business combination (Note 38)	37,823
Additions	40,682
At 31 December 2022	271,540
Accumulated amortisation:	
At 1 January 2021	(26,404)
Charge for the year	(3,417)
At 31 December 2021	(29,821)
Business combination (Note 38)	(2,837)
Charge for the year	(5,040)
At 31 December 2022	(37,698)
Net book value:	
At 31 December 2022	233,842
At 31 December 2021	163,214

The amortisation charge for the year is included in "cost of sales" and "administrative expenses" in the consolidated statement of profit or loss.

15 Lease prepayments (continued)

Right-of-use assets

The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

	2022 **RMB'000**	2021 RMB'000
Lease prepayments, carried at depreciated cost in the PRC, with remaining lease term of between 10 and 50 years	**233,842**	163,214

The analysis of expense items in relation to leases recognised in profit or loss is as follows:

	2022 **RMB'000**	2021 RMB'000
Amortisation charge of right-of-use assets by class of underlying asset:		
Lease prepayments	**5,040**	3,417
Expenses relating to short-term leases and low-value assets	**1,398**	736

During the year ended 31 December 2022, additions right-of-use assets were RMB40,682,000 for purchase of leasehold land (2021: RMB19,055,000 for purchase of leasehold land) and RMB37,823,000 for leasehold land acquired through business combination (2021: RMB nil). Details of total cash outflows for leases are set out in Note 27(d).

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16 Intangible assets

	Patents and trademarks RMB'000	Technical know-how RMB'000	Software RMB'000	Total RMB'000
Cost:				
At 1 January 2021	19,000	–	–	19,000
Additions	–	–	–	–
At 31 December 2021 and 1 January 2022	19,000	–	–	19,000
Business combination (Note 38)	–	44,500	–	44,500
Transfer from property, plant and equipment (Note 14)	–	–	13,819	13,819
At 31 December 2022	19,000	44,500	13,819	77,319
Accumulated amortisation:				
At 1 January 2021	(158)	–	–	(158)
Charge for the year	(1,900)	–	–	(1,900)
At 31 December 2021 and 1 January 2022	(2,058)	–	–	(2,058)
Charge for the year	(1,900)	(1,589)	–	(3,489)
Transfer from property, plant and equipment (Note 14)	–	–	(6,439)	(6,439)
At 31 December 2022	(3,958)	(1,589)	(6,439)	(11,986)
Net book value:				
At 31 December 2022	15,042	42,911	7,380	65,333
At 31 December 2021	16,942	–	–	16,942

17 Goodwill

	RMB'000
Cost:	
Balance at 1 January 2022 and 31 December 2021	21,959
Business combination (Note 38)	122,641
At 31 December 2022	144,600
Accumulated impairment losses:	
Balance at 1 January and 31 December	–
Carrying amount:	
At 31 December 2022	144,600
At 31 December 2021	21,959

For the purpose of impairment testing, goodwill is allocated to the Group's operating divisions which represent the lowest level within the Group at which the goodwill is monitored for internal management purposes.

Goodwill is allocated to the Group's CGUs identified according to the reportable segments as follows:

	2022 **RMB'000**	2021 RMB'000
DS	**21,959**	21,959
Cutting Tools	**122,641**	–
	144,600	21,959

17 Goodwill (continued)

Cutting tools

The recoverable amount of the CGU is determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated to be the same as that of the respective final forecast year on existing production capacity. The cash flows are discounted using a discount rate of 15.8% (2021: nil). The discount rates used are pre-tax and reflect specific risks relating to the relevant segments.

DS

The recoverable amount of the CGU is determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a two-year period. Cash flows beyond the two-year period are extrapolated using an estimated weighted average growth rate of 2% (2021: 2%) which is consistent with the forecasts included in industry reports. The growth rates used do not exceed the long-term average growth rates for the business in which the CGU operates. The cash flows are discounted using a discount rate of 9.2% (2021: 9.3%). The discount rates used are pre-tax and reflect specific risks relating to the relevant segments.

Management determined the budgeted gross margin and growth rate of revenue based on past performance and its expectation for market development. The discount rate used is pre-tax and reflects specific risks relating to the relevant segments.

The recoverable amounts of the CGUs are higher than their carrying amounts based on value-in-use calculations. Accordingly, no impairment of goodwill is recognised in the consolidated statement of profit or loss.

(Expressed in Renminbi unless otherwise indicated)

18 Interest in subsidiaries

The following list contains only the subsidiaries which principally affected the results, assets or liabilities of the Group. The class of shares held is ordinary shares unless otherwise stated.

Name of company	Place and date of incorporation	Proportion of ownership interest Direct	Proportion of ownership interest Indirect	Issued and fully paid-up/ registered capital	Principal activity
China Tiangong Company Limited	British Virgin Islands, 14 August 2006	100%	–	United States dollar ("USD") 50,000/ USD50,000	Investment holding
TG Tools	The PRC, 7 July 1997	–	82.35%	RMB2,608,441,142/ RMB2,608,441,142	Research and development, manufacture and sale of high speed steel and die steel
TG Aihe	The PRC, 5 December 2003	–	100%	RMB2,000,000,000/ RMB2,000,000,000	Research and development, manufacture and sale of die steel and high speed steel
China Tiangong (Hong Kong) Company Limited ("CTCL (HK)")	Hong Kong, 13 June 2008	–	100%	HKD1/ HKD1	Investment holding
TG Tech	The PRC, 27 January 2010	–	74.03%	RMB586,600,015/ RMB586,600,015	Research and development, manufacture and sale of titanium related products
Tiangong Development Hong Kong Company Limited ("TG Development")	Hong Kong, 15 February 2012	–	100%	USD5,500,000/ USD5,500,000	Trading of special steel
Weijian Tools	The PRC, 29 May 2013	–	100%	RMB46,705,425/ RMB52,195,485	Research and development, manufacture and sale of high speed steel-related products
Jiangsu Tiangong International Trading Company Limited	The PRC, 6 March 2014	–	100%	RMB20,000,000/ RMB50,000,000	Trading of goods
Jurong Tiangong New Materials Technology Company Limited ("TG New Materials")	The PRC, 29 July 2015	–	100%	RMB300,000,000/ RMB300,000,000	Research and development, manufacture and sale of high speed steel and die steel related products

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18 Interest in subsidiaries (continued)

Name of company	Place and date of incorporation	Proportion of ownership interest Direct	Proportion of ownership interest Indirect	Issued and fully paid-up/ registered capital	Principal activity
Precision Tools	The PRC, 25 January 2016	–	100%	HKD600,000,000/ HKD600,000,000	Research and development, manufacture and sale of cutting tools related products
Danyang Taifeng Precision Machinery Tools Company Limited (Note (i))	The PRC, 5 February 2016	–	–	–	Manufacture, distribution and sale of cutting tools related products
Jiangsu Tiangong Investment Management Company Limited	The PRC, 9 March 2017	–	100%	RMB534,693,445/ RMB535,000,000	Investment management and advisory related services
Tiangong Precision Tools Company Limited	British Virgin Islands, 12 January 2018	100%	–	–/ USD50,000	Investment holding
Tiangong Precision Tools (Hong Kong) Company Limited	Hong Kong, 7 February 2018	–	100%	HKD1/ HKD1	Investment holding and trading of cutting tools
TGSS	Thailand, 16 August 2019	–	99.2%	Thai Baht ("THB") 100,000,000/ THB100,000,000	Trading of special steel
Changzhou Junrui Tools Company Limited	The PRC, 24 October 2019	–	65%	RMB3,000,000/ RMB3,000,000	Sale of cutting tools related products
TGPT	Thailand, 25 October 2019	–	100%	THB270,000,000/ THB270,000,000	Manufacture and sale of cutting tools related products
TG Special Steel USA Co., Ltd.	the United States, 12 May 2020	–	100%	–/USD10,000	Trading of special steel
Guiyang Tiancheng Business Management Co., Ltd.	The PRC, 29 July 2020	–	51%	RMB10,000,000/ RMB10,000,000	Business management and related advisory services
Jiangsu Tiangong New Materials Company Limited	The PRC, 29 September 2020	–	100%	RMB300,000,000/ RMB300,000,000	Investment holding

(Expressed in Renminbi unless otherwise indicated)

18 Interest in subsidiaries (continued)

Name of company	Place and date of incorporation	Proportion of ownership interest Direct	Proportion of ownership interest Indirect	Issued and fully paid-up/ registered capital	Principal activity
Jurong Tiangong Precision Metal Products Company Limited	The PRC, 18 January 2021	–	100%	RMB1,300,000/ RMB30,000,000	Trading of goods
Guangdong Aihe Mould Technology Co., Ltd.	The PRC, 27 July 2021	–	100%	RMB23,000,000/ RMB120,000,000	Research and development, manufacture and sale of special steel related product
Jiangsu Tiangong Youcai Technology Company Limited (Note (ii))	The PRC, 25 August 2021	–	–	–	Research and development, manufacture and sale of titanium related product
Jiangsu Tiangong Carbide Technology Company Limited	The PRC, 21 December 2021	–	84%	RMB26,000,000/ RMB26,000,000	Manufacture and sale of carbide cutting tools
Jiangsu Tiangong New Material Applied Technology Company Limited (Note (iii))	The PRC, 11 April 2022	–	100%	–/ RMB60,000,000	Research and development, manufacture and sale of special steel related product
Tiangong Ostte (Shenzhen) Industrial Technology Co., Ltd (Note (iv))	The PRC, 27 July 2022	–	51%	RMB980,000/ RMB5,000,000	Research and development, manufacture and sale of cutting tools related products
Jiangsu Tianguan Precision Machinery Development Co., Ltd. ("Tianguan Precision") (Note 38(a))	The PRC, 8 November 2016	–	100%	RMB100,000,000/ RMB100,000,000	Research and development, manufacture and sale of cutting tools related products
Jiangsu Tiangong Solomon Alloy New Material Co., Ltd ("Tiangong Solomon") (Note 38(b))	The PRC, 8 March 2021	–	55%	RMB30,000,000/ RMB30,000,000	Research and development, manufacture and sale of titanium related products

Note:

(i) Danyang Taifeng Precision Machinery Tools Company Limited completed its deregistration on 22 December 2022.

(ii) Jiangsu Tiangong Youcai Technology Company Limited completed its deregistration on 30 June 2022.

(iii) On 11 April 2022, TG Aihe established a subsidiary Jiangsu Tiangong New Material Applied Technology Company Limited. Jiangsu Tiangong New Material Applied Technology Company Limited is principally engaged in downstream processing and distribution of special steel.

(iv) On 27 July 2022, Precision Tools established a subsidiary Tiangong Ostte (Shenzhen) Industrial Technology Co., Ltd with two individuals. Tiangong Ostte (Shenzhen) Industrial Technology Co., Ltd is principally engaged in distribution of cutting tools.

18 Interest in subsidiaries (continued)

All the subsidiaries incorporated in PRC are limited liability companies except for TG Tools and TG Tech, which are joint stock limited companies.

The following table lists out information relating to TG Tech, the subsidiary of the Group, which has a material non-controlling interest ("NCI"). The summarised financial information presented below represents the amounts before any inter-company elimination.

	2022 RMB'000	2021 RMB'000
NCI percentage	**25.97%**	25.97%
Current assets	**676,066**	607,623
Non-current assets	**170,142**	110,267
Current liabilities	**(141,434)**	(34,973)
Non-current liabilities	**(10,715)**	(13,941)
Net assets	**694,059**	668,976
Carrying amount of NCI	**186,113**	169,411
Revenue	**383,302**	279,893
Profit for the year	**70,307**	20,343
Total comprehensive income	**70,307**	20,343
Profit allocated to NCI	**18,500**	5,283
Dividend paid to NCI	**15,234**	–
Cash flows from operating activities	**72,234**	18,571
Cash flows from investing activities	**(16,891)**	(2,326)
Cash flows from financing activities	**(58,660)**	–

(Expressed in Renminbi unless otherwise indicated)

19 Interest in associates

The following list contains only the particulars of associates, all of which are unlisted corporate entities whose quoted market price is not available:

Name of associate	Note	Form of business structure	Place of incorporation and business	Particulars of issued and paid-up capital	Proportion of ownership interest			Principal activity
					Group's effective interest	Held by the Company	Held by a subsidiary	
Xinzhenggong Company Limited ("XZG")		Incorporated	Taiwan	Taiwan new dollars ("TWD") 200,000,000	20.83%	–	20.83%	Sale of special steel related products
SB Specialty Metals Holdings LLC ("SBSMH")		Incorporated	United States of America	USD8,625,000	19.75%	–	19.75%	Sale of special steel related products
Fusion TG Canada Inc ("TGC")		Incorporated	Canada	Canada dollars ("CAD") 6,300,000	20%	20%	–	Sale of special steel related products
Aceros T&C Company Limited ("ATC")	(i)	Incorporated	Mexico	–	–	–	–	Sale of special steel related products
Kushan Tianzhong New Materials Technology Co., Ltd ("TZNMT")		Incorporated	The PRC	RMB10,000,000	40%	–	40%	Sale of special steel related products
Tiantai Mould Technology (Kunshan) Co., Ltd ("TTMT")		Incorporated	The PRC	RMB10,000,000	40%	–	40%	Sale of special steel related products
Chengdu Tiante Mould Technology Co., Ltd. ("CDTT")		Incorporated	The PRC	RMB10,000,000	40%	–	40%	Sale of special steel related products
Guangdong Tiannuo New Materials Technology Co., Ltd ("GDTN")	(ii)	Incorporated	The PRC	RMB5,000,000	30%	–	30%	Sale of special steel related products
Guangdong Tianjiayu Mould Technology Co., Ltd ("GDTJY")	(iii)	Incorporated	The PRC	RMB12,500,000	30%	–	30%	Sale of special steel related products

19 Interest in associates (continued)

Note:

(i) ATC is principally engaged in sale of special steel related products in the Mexico. On 5 August 2022, the Group disposed all of its equity interest in ATC at a consideration of RMB5,000.

(ii) On 15 February 2022, TG Aihe formed an associate GDTN with a third-party moulding company in the PRC. GDTN is engaged in downstream processing and distribution of special steel.

(iii) On 20 April 2022, TG Aihe established an associate GDTJY with two individuals. GDTJY is principally engaged in downstream processing and distribution of special steel.

All of the above associates are accounted for using the equity method in the consolidated financial statements.

Aggregate information of associates that are not individually material:

	2022 RMB'000	2021 RMB'000
Aggregate carrying amount of individually immaterial associates in the consolidated financial statements	**95,473**	61,814

	2022 RMB'000	2021 RMB'000
Aggregate amounts of the Group's share of those associates'		
— Profits from continuing operations	**16,470**	12,543
— Other comprehensive income	**3,084**	(1,599)
Total comprehensive income	**19,554**	10,944

20 Interest in joint ventures

Details of the Group's interest in joint ventures, which are accounted for using the equity method in the consolidated financial statements, are set out below:

Name of joint venture	Form of business structure	Place of incorporation and business	Particulars of issued and paid-up capital	Proportion of ownership interest: Group's effective interest	Proportion of ownership interest: Held by the Company	Proportion of ownership interest: Held by a subsidiary	Principal activity
TG Korea Company Limited ("TG Korea") (Note)	Incorporated	The Republic of Korea	–	–	–	–	Sale of special steel related products
TGK Special Steel PVT Limited ("TGK")	Incorporated	India	USD2,000,000	50%	–	50%	Sale of special steel related products
TG Czech S.R.O. ("CTM")	Incorporated	Czech Republic	Czech Koruna ("CZK") 26,140,000	50%	–	50%	Sale of special steel related products
Five Star Special Steel Europe S.R.L ("FSS")	Incorporated	Italy	Euro ("EUR") 100,000	60%	–	60%	Sale of special steel related products
TG Middle East Celik San Ltd. ("TGME")	Incorporated	Turkey	EUR1,000,000	50%	–	50%	Sale of special steel related products

Note: TG Korea is the sole distributor of the Group's special steel products in Korea. On 28 November 2022, the Group disposed all of its equity interest in TG Korea at a consideration of RMB1,230,000.

Aggregate information of joint ventures that are not individually material:

	2022 RMB'000	2021 RMB'000
Aggregate carrying amount of individually immaterial joint ventures in the consolidated financial statements	**47,669**	38,699

	2022 RMB'000	2021 RMB'000
Aggregate amount of the Group's share of those joint ventures'		
— Profits from continuing operations	**13,248**	9,418
— Other comprehensive income	**(4,278)**	931
Total comprehensive income	**8,970**	10,349

21 Other financial assets

	Note	2022 RMB'000	2021 RMB'000
Equity securities designated at FVOCI (non-recycling)			
— Listed in the PRC	(i)	**105,024**	126,930
— Unlisted equity security	(ii)	**120**	4,040
Financial asset measured at fair value through profit or loss (FVPL)			
— Unlisted units in investment funds	(iii)	**84,550**	54,340
		189,694	185,310

Note:

(i) The listed equity securities are shares in Bank of Jiangsu Co., Ltd., a company listed on the Mainboard of the Shanghai Stock Exchange ("SSE") and shares in JM Digital Steel Inc., a company listed on the National Equities Exchange and Quotations System ("NEEQ"). The Group designated these investments at FVOCI (non-recycling), as the investments are held for strategic purposes. Dividends of RMB6,820,000 were received from these investments during the year ended 31 December 2022 (2021: RMB4,795,000).

(ii) The unlisted equity security is equity interest in Nanjing Xiaomuma Technology Co., Ltd., a company incorporated in the PRC. The Group designated the investment at FVOCI (non-recycling), as the investment is held for strategic purposes. No dividends were received from these investments during the year ended 31 December 2022 (2021: RMB nil).

(iii) The unlisted units in investment fund are interests in Xiamen Chuangfeng Yizhi Investment Management Partnership, Jinan Financial Fosun Weishi Equity Investment Fund Partnership, Ningbo Meishan Free Trade Port Qian Equity Investment Partnership (Limited Partnership), CICC Jiatai Private Equity Fund III (Shenzhen) Partnership (Limited Partnership) and Danyang Boyun Hengda Tiangong Industrial Investment Center (Limited Partnership), which are partnerships incorporated in the PRC. These investments are primarily engaged in or further invested in the industrial and technology sectors. Dividends of RMB2,409,000 were received from these investments during the year ended 31 December 2022 (2021: RMB282,000).

22 Financial assets measured at fair value through profit or loss (FVPL)

	2022 RMB'000	2021 RMB'000
Trading securities	**1,041**	1,651

Note: The trading securities are the Group's portfolio of listed equity securities in the capital markets of the PRC and Hong Kong. The Group measured these listed equity securities at FVPL, as the investments are held for trading purposes. Dividends of RMB3,000 were received from these trading securities during the year ended 31 December 2022 (2021: nil).

23 Inventories

(a) Inventories in the consolidated statement of financial position comprise:

	2022 RMB'000	2021 RMB'000
Raw materials	**160,014**	79,577
Work in progress	**1,510,800**	1,193,409
Finished goods	**912,656**	1,004,624
	2,583,470	2,277,610

(b) The analysis of the amount of inventories recognised as an expense and included in profit or loss is as follows:

	2022 RMB'000	2021 RMB'000
Carrying amount of inventories sold	**3,890,063**	4,337,189
Provision for write-down of inventories	**28,257**	2,486
	3,918,320	4,339,675

24 Trade and other receivables

	2022 RMB'000	2021 RMB'000
Trade receivables	**1,697,853**	1,305,126
Bills receivable	**699,453**	663,156
Less: loss allowance	**(111,645)**	(84,948)
Net trade and bills receivable	**2,285,661**	1,883,334
Prepayments	**223,327**	132,280
Non-trade receivables	**132,243**	122,278
Less: loss allowance	**(8,523)**	(6,633)
Net prepayments and non-trade receivables	**347,047**	247,925
	2,632,708	2,131,259

Substantially all of the trade and other receivables are expected to be recovered or recognised as an expense within one year.

Certain bills receivable held by the Group are achieved by both collection of contractual cash flows and sales, which are measured at fair value through other comprehensive income. As at 31 December 2022, bills receivable of RMB87,409,000 (2021: RMB133,219,000) whose fair values approximate to their carrying values were classified as financial assets at fair value through other comprehensive income under IFRS 9. The fair value changes of these bills receivable at fair value through other comprehensive income were insignificant during the year. Historically, the Group has experienced no significant credit losses on bills receivable. The Group from time to time endorses certain bills receivable to suppliers in order to settle trade payables.

As at 31 December 2022, the Group endorsed certain bills receivable with a total carrying amount of RMB412,077,000 (2021: RMB218,614,000) to suppliers for settling trade payables of the same amount on a full recourse basis. In the opinion of the directors of the Company, the Group has not transferred the substantial risks and rewards relating to these bills, and accordingly, it continued to recognise the full carrying amounts of these bills receivable and the associated trade payables settled.

24 Trade and other receivables (continued)

As at 31 December 2022, the Group endorsed certain bills receivable to suppliers for settling trade payables of the same amount on a full recourse basis. The Group has derecognised these bills receivable and payables to suppliers in their entirety. In the opinion of the directors of the Company, the Group has transferred substantially all the risks and rewards of ownership of these bills and has discharged its obligation of the payables to its suppliers, and the Group has limited exposure in respect of the settlement obligation of these bills receivable under the relevant PRC rules and regulations, should the issuing banks fail to settle the bills on maturity date. The Group considers the issuing banks of these bills are of good credit quality and non-settlement of these bills by the issuing banks on maturity is not probable. As at 31 December 2022, the Group's maximum exposure to loss and undiscounted cash outflow, which is the same as the amount payable by the Group to suppliers in respect of the endorsed bills, should the issuing banks fail to settle the bills on maturity date, amounted to RMB192,662,000 (2021: RMB204,753,000).

As at 31 December 2022, bills receivable of RMB158,000,000 (2021: RMB208,000,000) were discounted to financial institutions. In the opinion of the directors of the Company, the Group has transferred substantially all the risks and rewards of ownership of these bills and the Group has limited exposure in respect of the settlement obligation of these bills receivable under the relevant PRC rules and regulations, should the issuing banks fail to settle the bills on maturity date. The Group considers the issuing banks of these bills are of good credit quality and non-settlement of these bills by the issuing banks on maturity is not probable.

Trade receivables of RMB145,131,000 (2021: RMB175,195,000) have been pledged to a bank as security for the Group's bank loans.

24 Trade and other receivables (continued)

Ageing analysis

As of the end of the reporting period, the ageing analysis of trade and bills receivable (which are included in trade and other receivables), based on the invoice date and net of loss allowance, is as follows:

	2022 RMB'000	2021 RMB'000
Within 3 months	**1,523,341**	1,498,858
4 to 6 months	**292,466**	108,920
7 to 12 months	**325,498**	116,536
1 to 2 years	**113,999**	150,321
Over 2 years	**30,357**	8,699
	2,285,661	1,883,334

Trade receivables are due from 90 to 180 days from the date of billing. Further details on the Group's credit policy and credit risk arising for trade receivables are set out in Note 34(a).

25 Pledged deposits

As at 31 December 2022, bank deposits of RMB140,041,000 (2021: RMB244,191,000) have been pledged to banks as security for the Group to issue bank acceptance bills and other banking facilities. The pledge in respect of the bank deposits will be released upon the settlement of the related bills by the Group and the termination of related banking facilities.

26 Time deposits

As at 31 December 2022, time deposits of RMB1,341,834,000 (2021: RMB1,749,481,000) in the consolidated statement of financial position represent bank deposits that are over 3 months of maturity at acquisition.

27 Cash and cash equivalents and other cash flow information

(a) Cash and cash equivalents comprise:

As at 31 December 2022 and 2021, all of the Group's cash and cash equivalents in the consolidated statement of financial position and the consolidated cash flow statement represented cash at bank and cash on hand.

	2022 RMB'000	2021 RMB'000
Cash at bank and on hand	**1,219,843**	1,356,881

27 Cash and cash equivalents and other cash flow information (continued)

(b) Reconciliation of profit before taxation to cash generated from operations:

	Note	**2022 RMB'000**	2021 RMB'000
Profit before taxation		**519,360**	751,655
Adjustments for:			
Depreciation of property, plant and equipment	8(c)	**324,436**	294,377
Amortisation of lease prepayments	8(c)	**5,040**	3,417
Amortisation of intangible assets	8(c)	**3,489**	1,900
Interest income	8(a)	**(46,294)**	(27,563)
Interest expenses	8(a)	**176,189**	159,047
Net losses on disposal of property, plant and equipment	7	**3,293**	3,002
Dividend income	6	**(9,232)**	(5,077)
Unrealised fair value changes of other financial assets	6	**(4,910)**	(11,502)
Net losses/(gains) on trading securities	6/7	**610**	(3,816)
Realised gains on structured deposits	6	**(2,579)**	(21,492)
Gains from disposals of interest in associates, a joint venture and a subsidiary	6	**(1,927)**	(1,125)
Provision for loss allowance on trade and other receivables	8(c)	**24,645**	5,318
Share of profits less losses of associates	19	**(16,470)**	(12,543)
Share of profits less losses of joint ventures	20	**(13,248)**	(9,418)
Changes in working capital:			
Change in inventories		**(300,802)**	(589,239)
Change in trade and other receivables		**(516,952)**	353,646
Change in trade and other payables		**231,746**	(240,018)
Change in deferred income		**(7,776)**	(7,776)
Cash generated from operations		**368,618**	642,793

27 Cash and cash equivalents and other cash flow information (continued)

(c) Reconciliation of liabilities arising from financing activities:

The table below details changes in the Group's liabilities from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are liabilities for which cash flows were, or future cash flows will be, classified in the Group's consolidated cash flow statement as cash flows from financing activities.

	Interest-bearing borrowings RMB'000	Interest payable RMB'000	Other financial liability RMB'000	Total RMB'000
At 1 January 2021	3,365,819	2,514	350,000	3,718,333
Changes from financing cash flows:				
Proceeds from interest-bearing borrowings	4,480,470	–	–	4,480,470
Repayment of interest-bearing borrowings	(5,207,503)	–	–	(5,207,503)
Interest paid	–	(106,728)	–	(106,728)
Proceeds from contingent redeemable capital contributions in a subsidiary	–	–	1,065,000	1,065,000
Total changes from financing cash flows	(727,033)	(106,728)	1,065,000	231,239
Other changes:				
Interest expenses (Note 8(a))	–	113,261	53,050	166,311
Capitalised borrowing costs (Note 8(a))	–	(7,264)	–	(7,264)
Total other changes	–	105,997	53,050	159,047
At 31 December 2021 and 1 January 2022	2,638,786	1,783	1,468,050	4,108,619
Changes from financing cash flows:				
Proceeds from interest-bearing borrowings	3,352,797	–	–	3,352,797
Repayment of interest-bearing borrowings	(3,225,488)	–	–	(3,225,488)
Interest paid	–	(119,104)	–	(119,104)
Total changes from financing cash flows	127,309	(119,104)	–	8,205
Exchange adjustments	84,218	–	–	84,218
Other changes:				
Interest expenses (Note 8(a))	–	119,589	56,600	176,189
Business combination (Note 38)	45,000	–	–	45,000
Total other changes	45,000	119,589	56,600	221,189
At 31 December 2022	2,895,313	2,268	1,524,650	4,422,231

27 Cash and cash equivalents and other cash flow information (continued)

(d) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2022 RMB'000	2021 RMB'000
Within operating cash flows	**1,398**	736
Within investing cash flows	**40,682**	19,055
	42,080	19,791

These amounts relate to the following:

	2022 RMB'000	2021 RMB'000
Lease rentals paid	**1,398**	736
Purchase of leasehold land	**40,682**	19,055
	42,080	19,791

27 Cash and cash equivalents and other cash flow information (continued)

(e) Net cash outflow arising from the acquisition of subsidiaries

The recognised amounts of assets acquired and liabilities at the date of acquisition of the subsidiaries comprise the following:

	Acquisition of Tianguan Precision RMB'000	Acquisition of Tiangong Solomon RMB'000	Total RMB'000
Property, plant and equipment (Note 38)	171,937	317	172,254
Lease prepayments (Note 15)	34,986	–	34,986
Intangible assets (Note 16)	44,500	–	44,500
Goodwill (Note 17)	122,641	–	122,641
Trade and other receivables	5,593	2,225	7,818
Cash and cash equivalents	3,152	27,395	30,547
Inventories	5,058	–	5,058
Trade and other payables	(53,630)	(77)	(53,707)
Interest-bearing borrowings	(45,000)	–	(45,000)
Deferred tax liabilities (Note 32(c))	(13,237)	–	(13,237)
	276,000	29,860	305,860
Less:			
Non-controlling interest, based on proportionate interest in the recognised assets of identified net assets	–	(13,437)	(13,437)
Carrying amount of interest in Tiangong Solomon prior to business combination	–	(1,423)	(1,423)
Total consideration paid in cash	276,000	15,000	291,000
Less: cash of subsidiaries acquired	(3,152)	(27,395)	(30,547)
	272,848	(12,395)	260,453

28 Trade and other payables

	2022 RMB'000	2021 RMB'000
Trade and bills payable	**1,272,129**	1,181,988
Contract liabilities	**23,476**	29,505
Non-trade payables and accrued expenses	**364,174**	162,348
	1,659,779	1,373,841

All trade and other payables are expected to be settled or recognised as income within one year or are repayable on demand.

As of the end of the reporting period, the ageing analysis of trade and bills payable (which are included in trade and other payables), based on the invoice date, is as follows:

	2022 RMB'000	2021 RMB'000
Within 3 months	**711,968**	608,438
4 to 6 months	**402,223**	223,973
7 to 12 months	**118,981**	304,886
1 to 2 years	**28,428**	22,688
Over 2 years	**10,529**	22,003
	1,272,129	1,181,988

(Expressed in Renminbi unless otherwise indicated)

29 Interest-bearing borrowings

	Note	2022 RMB'000	2021 RMB'000
Current			
Secured bank loans	(i)	**130,485**	157,544
Unsecured bank loans	(ii)	**1,010,828**	1,015,895
Current portion of non-current unsecured bank loans		**725,500**	427,347
		1,866,813	1,600,786
Non-current			
Unsecured bank loans	(iii)	**1,754,000**	1,465,347
Less: Current portion of non-current unsecured bank loans		**(725,500)**	(427,347)
		1,028,500	1,038,000
		2,895,313	2,638,786

Note:

(i) Current secured bank loans are secured by pledged deposits, certain trade receivables and sales contracts at annual interest rates ranging from 0.79% to 2.84% (2021: 0.76% to 0.82%) per annum.

(ii) Current unsecured bank loans carry interest at annual rates ranging from 0.90% to 4.35% (2021: 0.90% to 4.75%) per annum and are all repayable within one year.

(iii) Non-current unsecured bank loans carry interest at annual rates ranging from 2.70% to 4.75% (2021: 3.85% to 4.75%) per annum.

The current and non-current portion of the Group's non-current bank loans were repayable as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	**725,500**	427,347
Over 1 year but less than 2 years	**774,500**	579,000
Over 2 years but less than 5 years	**254,000**	459,000
	1,754,000	1,465,347

As at 31 December 2022, the Group's banking facility with two (2021: one) banks are subject to the fulfilment of covenants relating to certain of the Group's balance sheet ratios, as are commonly found in lending arrangements with financial institutions. If the Group were to breach the covenant, the drawn down facilities would become payable on demand. The Group regularly monitors its compliance with covenants. Further details of the Group's management of liquidity risk are set out in Note 34(b).

30 Deferred income

Deferred income consists of conditional government grants received for completion of certain construction projects. As at 31 December 2022, the carrying amount of deferred income in respect of government grants after amortisation (Note 6(i)) amounted to RMB42,530,000 (2021: RMB50,306,000).

31 Other financial liability

The analysis of the carrying amount of other financial liability is as follows:

	2022 **RMB'000**	2021 RMB'000
Contingent redeemable capital contributions in a subsidiary	**1,524,650**	1,468,050

On 28 December 2020, the Company, TG Tools, Jurong Tiangong New Materials Technology Company Limited, China Tiangong (Hong Kong) Company Limited, Precision Tools, TG Aihe, Weijian Tools, Jiangsu Tiangong New Materials Company Limited, TG Development and certain third party investors (the "Investors") entered into an investment agreement, pursuant to which the Investors will invest RMB1,415,000,000 to acquire 16.65% of the equity interest in TG Tools (collectively referred to as "the Investment in TG Tools"). The Investors are entitled to the same voting rights and dividend rights as other equity holders of TG Tools, whereas certain special rights including redemption, anti-dilution and preferential liquidation rights are granted to the Investors. As at 31 December 2021, the Group received all the capital contributions of RMB1,415,000,000 from the Investors.

On 28 December 2020, TG Tools and a partnership in the PRC, being a shareholding platform of certain employees of TG Tools, entered into the subscription agreement, pursuant to which the partnership will invest RMB85,000,000 to acquire 1% of the equity interest in TG Tools. The partnership are not entitled to the special rights attributable to the Investors. As at 31 December 2021, the Group received all the capital contributions of RMB85,000,000 from the partnership.

At the date of issuance of the Investment in TG Tools, the Investment in TG Tools is initially recognised at fair value and is carried at amortised cost for subsequent periods. Interest on the Investment in TG Tools is calculated using the effective interest method and recognised in the consolidated statement of profit or loss.

(Expressed in Renminbi unless otherwise indicated)

32 Income tax in the consolidated statement of financial position

(a) Current taxation in the consolidated statement of financial position represents:

	2022 RMB'000	2021 RMB'000
At the beginning of the year	**40,955**	64,138
Provision for PRC Corporate Income Tax for the year	**29,543**	72,340
Provision for Hong Kong Profits Tax for the year	**20,880**	3,642
Provision for USA Profits Tax for the year	**931**	–
Provision for Thailand Corporate Income Tax for the year	**996**	1,328
Hong Kong Profits Tax paid	**(6,383)**	(9)
Thailand Corporate Income Tax paid	**(1,022)**	(754)
PRC taxes paid	**(57,660)**	(99,730)
At the end of the year	**28,240**	40,955

(b) Deferred tax assets recognised and not recognised

The components of the deferred tax assets recognised in the consolidated statement of financial position and the movements during the year are as follows:

Deferred tax arising from:	Deductible tax losses RMB'000	Unrealised profits RMB'000	Loss allowance for trade and other receivables RMB'000	Write-down of inventories RMB'000	Government grants RMB'000	Depreciation of fixed assets RMB'000	Deductible fixed assets RMB'000	Total RMB'000
At 1 January 2021	4,583	19,352	14,882	5,353	–	–	–	44,170
(Charged)/credited to profit or loss	(4,258)	(2,558)	(1,269)	669	5,455	–	–	(1,961)
At 31 December 2021 and 1 January 2022	325	16,794	13,613	6,022	5,455	–	–	42,209
(Charged)/credited to profit or loss	8,874	1,702	4,584	5,001	(675)	130	(1,818)	17,798
At 31 December 2022	9,199	18,496	18,197	11,023	4,780	130	(1,818)	60,007

In accordance with the accounting policy set out in Note 3(q), the Group has not recognised deferred tax assets in respect of cumulative tax losses of RMB28,396,000 (2021: RMB10,161,000) as it is not probable that future taxable profits against which the losses can be utilised will be available in the relevant tax jurisdiction and entity. The tax losses incurred by subsidiaries in the PRC expire within 5 years from the year when such losses were incurred under current tax legislation.

32 Income tax in the consolidated statement of financial position (continued)

(c) Deferred tax liabilities recognised and not recognised

The components of deferred tax liabilities recognised in the consolidated statement of financial position and the movements during the year are as follows:

Deferred tax arising from:	Undistributed profits of subsidiaries RMB'000	Deductible capitalised borrowing costs RMB'000	Revaluation of equity securities RMB'000	Fair value adjustment arising from business combination RMB'000	Deductible fixed assets RMB'000	Total RMB'000
At 1 January 2021	18,999	55,233	13,069	13,732	–	101,033
(Credited)/charged to profit or loss	(2,431)	1,170	2,876	(861)	–	754
Credited to reserves	–	–	(1,696)	–	–	(1,696)
At 31 December 2021 and 1 January 2022	16,568	56,403	14,249	12,871	–	100,091
Business combination (Note 38)	–	–	–	13,237	–	13,237
(Credited)/charged to profit or loss	(16,568)	(26,379)	1,228	(1,275)	3,692	(39,302)
Credited to reserves	–	–	(2,720)	–	–	(2,720)
At 31 December 2022	–	30,024	12,757	24,833	3,692	71,306

As at 31 December 2022, deferred tax liabilities of RMB nil (2021: RMB16,568,000) were recognised in respect of tax that would be payable on the distribution of the retained profits of the Group's PRC subsidiaries in the foreseeable future. Deferred tax liabilities of RMB230,244,000 (2021: RMB177,031,000) have not been recognised in respect of distributable profits of certain subsidiaries of the Group, as the Group controls the timing of the reversal of temporary differences associated with undistributed profits of these subsidiaries and it has been determined that it is probable that the undistributed profits earned by these subsidiaries of the Group will not be distributed in the foreseeable future.

33 Capital, reserves and dividends

(a) Movements in components of equity

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

	Note	Share capital RMB'000	Share premium RMB'000	Capital redemption reserve RMB'000	Capital reserve RMB'000	Exchange reserve RMB'000	Accumulated losses RMB'000	Total RMB'000
Balance at 1 January 2021		46,186	2,066,883	564	3,195	5,833	(738,104)	1,384,557
Total comprehensive income for the year		–	–	–	–	(63)	(11,977)	(12,040)
Dividends approved in respect of the previous year	33(b)(ii)	–	–	–	–	–	(206,848)	(206,848)
Placing and subscription of shares	33(d)(ii)	3,213	686,955	–	–	–	–	690,168
Balance at 31 December 2021 and 1 January 2022	37	49,399	2,753,838	564	3,195	5,770	(956,929)	1,855,837
Total comprehensive income for the year		–	–	–	–	84	88,885	88,969
Dividends approved in respect of the previous year	33(b)(ii)	–	–	–	–	–	(165,429)	(165,429)
Repurchase of own shares		(168)	(26,018)	168	–	–	–	(26,018)
Balance at 31 December 2022	37	49,231	2,727,820	732	3,195	5,854	(1,033,473)	1,753,359

(b) Dividends

(i) Dividends payable to equity shareholders of the Company in respect of the year:

	2022 RMB'000	2021 RMB'000
Dividend proposed after the end of the reporting period of RMB0.0362 per ordinary share (2021: RMB0.0594 per ordinary share)	**100,707**	166,093

The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

33 Capital, reserves and dividends (continued)

(b) Dividends (continued)

(ii) Dividends payable to equity shareholders of the Company in respect of the previous financial year, approved and paid during the year:

	2022	2021
	RMB'000	RMB'000
Dividend in respect of the previous financial year, approved and paid during the year of RMB0.0594 per ordinary share (2021: RMB0.0732 per ordinary share)	**165,429**	206,848

In respect of the final dividend for the year ended 31 December 2021, there is a difference of RMB664,000 between the final dividend disclosed in the 2021 annual financial statements and amounts approved and paid during the year, which is mainly due to the change in number of ordinary shares arising from repurchase and cancellation of shares from March to May 2022 and the RMB/HKD exchange rate difference between the fixed middle average exchange rate on the date of the 2021 annual result announcement and the actual exchange rate applied on the date of payment.

(c) Repurchase of own shares

During 2022, the Company repurchased its own shares on The Stock Exchange of Hong Kong Limited as follows:

Month	**Number of shares repurchased**	**Highest price paid per share**	**Lowest price paid per share**	**Aggregate price paid**
		HKD	HKD	HKD'000
March 2022	1,648,000	3.20	3.06	5,176
April 2022	8,352,000	3.43	2.98	26,839
	10,000,000			32,015

In total, the Company repurchased 10,000,000 ordinary shares on the Main Board of The Stock Exchange of Hong Kong Limited at a consideration of HKD32,015,000 (equivalent to approximately RMB26,018,000). All the repurchased shares were cancelled during the year ended 31 December 2022 and accordingly the issued share capital of the Company was reduced by the nominal value of these shares. Pursuant to section 37 of the Cayman Islands Companies Law, an amount equivalent to the par value of the shares cancelled of RMB168,000 was transferred from share capital to the capital redemption reserve, and the balance of RMB26,018,000 reduced the share premium.

33 Capital, reserves and dividends (continued)

(d) Share capital

(i) Issued and fully paid share capital

Authorised:

	2022 and 2021	
	No. of Shares ('000)	Amount USD '000
Ordinary shares of USD0.0025 each (2021: USD0.0025)	4,000,000	10,000

Ordinary shares issued and fully paid:

	2022			2021		
	No. of shares ('000)	**Amount USD '000**	**RMB equivalent '000**	No. of shares ('000)	Amount USD '000	RMB equivalent '000
At 1 January	**2,795,000**	**6,997**	**49,399**	2,595,000	6,497	46,186
Repurchase of own shares	**(10,000)**	**(25)**	**(168)**	–	–	–
Placing and subscription of shares	**–**	**–**	**–**	200,000	500	3,213
At 31 December	**2,785,000**	**6,972**	**49,231**	2,795,000	6,997	49,399

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

(ii) Placing and subscription of shares

On 7 May 2021 and 12 May 2021, respectively, the Group completed a placement and subscription to subscribe for a total of 200,000,000 ordinary shares in the Company at a consideration of HKD834,301,000, of which HKD3,884,000 (equivalent to RMB3,213,000 or USD500,000) was credited to Share capital and HKD830,417,000 (equivalent to RMB686,955,000) was credited to the Share premium account.

33 Capital, reserves and dividends (continued)

(e) Nature and purpose of reserves

(i) Share premium and capital redemption reserve

The share premium represents the difference between the par value of the shares of the Company and the proceeds received from the issuance of shares or the consideration paid for the repurchased shares of the Company. Under the Companies Law of the Cayman Islands, the share premium account is distributable to shareholders of the Company provided that immediately following the date on which the dividend is proposed to be distributed, the Company will be in a position to repay its debts as they fall due in the ordinary course of business.

Capital redemption reserve represents the par value of shares repurchased by the Company pursuant to section 37 of the Cayman Islands Companies Law.

(ii) Capital reserve

The capital reserve comprises the following:

— Waived payables due to the Group in connection with the acquisition of land use rights and plant in 2007. These waivers of liabilities by the Group were regarded as equity transactions and recorded in the capital reserve account;

— The portion of the grant date fair value of unexercised share options granted to employees of the Group that has been recognised in accordance with the accounting policy adopted for share-based payments in Note 3(p)(ii); and

— Consideration received from issuance of warrants in accordance with the terms of warrant placing agreements entered into by the Company and the subscribers net of direct expenses.

(iii) Merger reserve

The merger reserve comprises the excess amount arising from the Group's reorganisation of group entities under common control in 2006 and 2007, of its share of the net identifiable assets acquired in these subsidiaries over the consideration paid. The reorganisation transactions were regarded as equity transactions and the excess of the share of the net identifiable assets over the consideration paid was transferred to the merger reserve in the consolidated financial statements.

(iv) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of Hong Kong subsidiaries and overseas equity-accounted investees. The reserve is dealt with in accordance with the accounting policies set out in Notes 3(a), (b) and (t).

33 Capital, reserves and dividends (continued)

(e) Nature and purpose of reserves

(v) Fair value reserve (non-recycling)

The fair value reserve (non-recycling) comprises the cumulative net change in the fair value of equity investments designated at FVOCI under IFRS 9 that are held at the end of the reporting period (see Note 3(d)).

(vi) PRC statutory reserves

Transfers from retained earnings to the following PRC statutory reserves were made in accordance with the relevant PRC rules and regulations and the Articles of Association of the Company's subsidiaries incorporated in the PRC and were approved by the respective boards of directors.

General reserve fund

The subsidiaries in the PRC are required to transfer at least 10% of their profit after tax, as determined under the PRC accounting regulations, to the general reserve fund until the reserve balance reaches 50% of their respective registered capital. The transfer to this reserve must be made before any distribution of dividends to shareholders.

The general reserve fund can be used to make good losses or be converted into share capital by the issuance of new shares to shareholders in proportion to their existing equity holdings, provided that the balance after such conversion is not less than 25% of these subsidiaries' registered capital.

Enterprise expansion fund

The enterprise expansion fund can be used to convert into share capital and to develop business.

(f) Distributability of reserves

As at 31 December 2022, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB1,694,347,000 (2021: RMB1,796,909,000). After the end of the reporting period, the directors of the Company proposed a final dividend of RMB0.0362 per ordinary share (2021: RMB0.0594), amounting to RMB100,707,000 (2021: RMB166,093,000). This dividend has not been recognised as a liability at the end of the reporting period.

(g) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholder returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

33 Capital, reserves and dividends (continued)

(g) Capital management (continued)

The Group monitors its capital structure on the basis of an adjusted net debt-to-capital ratio. For this purpose, adjusted net debt is defined as total debt (which includes interest-bearing borrowings) plus unaccrued proposed dividends, less cash and cash equivalents and time deposits. Adjusted capital comprises all components of equity, less unaccrued proposed dividends.

During 2022, the Group's strategy was to maintain a stable adjusted net debt-to-capital ratio. In order to maintain or adjust the ratio, the Group may adjust the amount of dividends paid to shareholders, issue new shares, return capital to shareholders, raise new debt financing or sell assets to reduce debt.

The Group's adjusted net debt-to-capital ratios at 31 December 2022 and 2021 were as follows:

	Note	2022 RMB'000	2021 RMB'000
Current liabilities:			
Interest-bearing borrowings	29	**1,866,813**	1,600,786
Non-current liabilities:			
Interest-bearing borrowings	29	**1,028,500**	1,038,000
Total debt		**2,895,313**	2,638,786
Add: Proposed dividends	33(b)	**100,707**	166,093
Less: Cash and cash equivalents	27	**(1,219,843)**	(1,356,881)
Time deposits	26	**(1,341,834)**	(1,749,481)
Adjusted net debt		**434,343**	(301,483)
Total equity		**7,141,333**	6,892,557
Less: Proposed dividends	33(b)	**(100,707)**	(166,093)
Adjusted capital		**7,040,626**	6,726,464
Adjusted net debt-to-capital ratio		**6%**	N/A

34 Financial risk management and fair values of financial instruments

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business. The Group is also exposed to equity price risk arising from its equity investments in other entities and movements in its own equity share price.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

(a) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. The Group's credit risk is primarily attributable to trade receivables. The Group's exposure to credit risk arising from cash and cash equivalents, time deposits, pledged deposits and bills receivable is limited because the counterparties are reputable financial institutions with high credit standing, for which the Group considers to have low credit risk.

Trade receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry or country in which the customers operate and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 13% (2021: nil%) and 31% (2021: 11%) of the total trade receivables was due from the Group's largest customer and the five largest customers respectively within DS, HSS and others segments.

Individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are due within 90 — 180 days from the date of billing. Normally, the Group does not obtain collateral from customers.

The Group measures loss allowance for trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix.

34 Financial risk management and fair values of financial instruments (continued)

(a) Credit risk (continued)

Trade receivables (continued)

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables:

	2022		
	Expected loss rate %	**Gross carrying amount RMB'000**	**Loss allowance RMB'000**
Current (not past due)	**5.0%**	**867,214**	**43,326**
1–9 months past due	**5.0%**	**650,401**	**32,437**
9–21 months past due	**10.9%**	**127,932**	**13,933**
More than 21 months past due	**42.0%**	**52,306**	**21,949**
		1,697,853	**111,645**

	2021		
	Expected loss rate %	Gross carrying amount RMB'000	Loss allowance RMB'000
Current (not past due)	4.9%	878,767	43,065
1–9 months past due	5.0%	237,283	11,827
9–21 months past due	10.9%	168,786	18,465
More than 21 months past due	57.1%	20,290	11,591
		1,305,126	84,948

34 Financial risk management and fair values of financial instruments (continued)

(a) Credit risk (continued)

Trade receivables (continued)

Expected loss rates are based on actual loss experience over the past years. These rates are adjusted to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

Movement in the loss allowance account in respect of trade receivables during the year is as follows:

	2022 **RMB'000**	2021 RMB'000
Balance at 1 January	**84,948**	87,095
Amounts written-off during the year	**(233)**	(5,346)
Loss allowance recognised during the year	**23,505**	3,199
Exchange gain and loss adjustment	**3,425**	–
Balance at 31 December	**111,645**	84,948

(b) Liquidity risk

Individual operating entities within the Group are responsible for their own cash management, including the short term investment of cash surpluses and the raising of loans to cover expected cash demands, subject to approval by the parent company's board when the borrowings exceed certain predetermined levels of authority. The Group's policy is to regularly monitor its liquidity requirements and its compliance with lending covenants, to ensure that it maintains sufficient reserves of cash and readily realisable marketable securities and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

34 Financial risk management and fair values of financial instruments (continued)

(b) Liquidity risk (continued)

The following tables show the remaining contractual maturities at the end of the reporting period of the Group's certain financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of the reporting period) and the earliest date the Group can be required to pay:

		2022 Contractual undiscounted cash outflow				
	Note	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 years but less than 5 years RMB'000	Total RMB'000	Carrying amount at 31 December RMB'000
Trade and other payables	28	**1,659,779**	**–**	**–**	**1,659,779**	**1,659,779**
Interest-bearing borrowings	29	**1,909,241**	**824,572**	**272,568**	**3,006,381**	**2,895,313**
		3,569,020	**824,572**	**272,568**	**4,666,160**	**4,555,092**

		2021 Contractual undiscounted cash outflow				
	Note	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 years but less than 5 years RMB'000	Total RMB'000	Carrying amount at 31 December RMB'000
Trade and other payables	28	1,373,841	–	–	1,373,841	1,373,841
Interest-bearing borrowings	29	1,664,262	609,511	463,819	2,737,592	2,638,786
		3,038,103	609,511	463,819	4,111,433	4,012,627

In addition to the above, the Group was also exposed to liquidity risk arising from the redemption features of other financial liability at 31 December 2022, which are further detailed in Note 31.

34 Financial risk management and fair values of financial instruments (continued)

(c) Foreign currency risk

The Group is exposed to currency risk primarily through sales, purchases and borrowings which give rise to receivables, payables, borrowings and cash balances that are denominated in a foreign currency, i.e. a currency other than the functional currency of the entity to which the transactions relate. The currencies giving rise to this risk are primarily USD, EUR, HKD and THB.

RMB is not freely convertible into foreign currencies. All foreign exchange transactions involving RMB must take place through the People's Bank of China or other institutions authorised to buy and sell foreign exchange. The exchange rate adopted for the foreign exchange transactions are the rates of exchange quoted by the People's Bank of China.

(i) Exposure to currency risk

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposures are shown in RMB, translated using the spot rate at the year end date. Differences resulting from the translation of the financial statements of the foreign operations into the Group's presentation currency are excluded.

	2022 Exposure to foreign currencies (expressed in RMB)				2021 Exposure to foreign currencies (expressed in RMB)		
	USD RMB'000	**EUR RMB'000**	**HKD RMB'000**	**THB RMB'000**	USD RMB'000	EUR RMB'000	HKD RMB'000
Trade and other receivables	**173,912**	**635,734**	**11,774**	**–**	154,375	401,531	10,776
Cash and cash equivalents	**70,787**	**274,661**	**7,812**	**1,661**	105,105	246,835	21,541
Trade and other payables	**(2,917)**	**–**	**–**	**–**	(836)	–	–
Interest-bearing borrowings	**(109,263)**	**(658,650)**	**(173,402)**	**–**	(205,361)	(494,943)	–
Net exposure arising from recognised assets and liabilities	**132,519**	**251,745**	**(153,816)**	**1,661**	53,283	153,423	32,317

34 Financial risk management and fair values of financial instruments (continued)

(c) Foreign currency risk (continued)

(ii) Sensitivity analysis

The following table indicates the instantaneous change in the Group's profit after tax (and retained profits) that would arise if foreign exchange rates to which the Group has significant exposure at the end of the reporting period had increased at that date, assuming all other risk variables remained constant.

	2022		2021	
	Increase in foreign exchange rates	**Increase/ (decrease) in profit after tax and retained profits RMB'000**	Increase in foreign exchange rates	Increase in profit after tax and retained profits RMB'000
USD	**10%**	**11,434**	5%	2,273
EUR	**10%**	**21,388**	5%	6,567
HKD	**10%**	**(15,475)**	5%	1,576
THB	**10%**	**136**	–	–

A decrease in foreign exchange rates would have had the equal but opposite effect to the amounts shown above, on the basis that all other variables remained constant.

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group entities' profit after tax and equity measured in the respective functional currencies, translated into RMB at the exchange rate ruling at the end of the reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of the reporting period, including inter-company payables and receivables within the Group which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis as for 2021.

34 Financial risk management and fair values of financial instruments (continued)

(d) Interest rate risk

The Group's interest rate risk arises primarily from interest-bearing borrowings, pledged deposits and time deposits.

Pledged bank deposits are not held for speculative purposes but are placed to satisfy conditions for the Group to issue bank acceptance bills and other banking facilities.

Interest-bearing borrowings issued at variable rates and at fixed rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively. The interest rates and terms of repayment of the interest-bearing borrowings of the Group are disclosed in Note 29.

(i) Interest rate risk profile

The following table details the interest rate profile of the Group's interest-bearing financial instruments at the end of the reporting period:

	2022		2021	
	Effective Interest rate %	**Amount RMB'000**	Effective Interest rate %	Amount RMB'000
Fixed rate instruments				
Interest-bearing borrowings	**0.79%~2.84%**	**231,998**	0.76%~0.82%	244,180
Other financial liability	**4%**	**1,524,650**	4%	1,468,050
Variable rate instruments				
Interest-bearing borrowings	**0.90%~4.75%**	**2,663,315**	0.90%~4.75%	2,394,606

(ii) Sensitivity analysis

As at 31 December 2022, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Group's profit after tax and retained profits by approximately RMB22,818,000 (2021: RMB20,266,000).

The sensitivity analysis above indicates the instantaneous change in the Group's profit after tax (and retained profits) that would arise assuming that the change in interest rates had occurred at the end of the reporting period and had been applied to floating rate non-derivative instruments held by the Group, which expose the Group to cash flow interest rate risk at the end of the reporting period and had been applied to re-measure those financial instruments held by the Group. The impact on the Group's profit after tax (and retained profits) is estimated as an annualised impact on interest expense or income of such a change in interest rates. The analysis is performed on the same basis as for 2021.

34 Financial risk management and fair values of financial instruments (continued)

(e) Equity price risk

The Group is mainly exposed to equity price changes arising from equity investments held for non-trading purposes (see Notes 21 and 22).

The Group's equity investments listed on the SESH and the NEEQ that are not held for trading purposes have been chosen based on their longer term growth potential and are monitored regularly for performance against expectations. The portfolio is diversified in terms of industry distribution, in accordance with the limits set by the Group.

Except for the above trading securities, all of the Group's equity investments and units in investment funds are held for long term strategic purposes. Their performance is assessed at least bi-annually against performance of similar listed entities, based on the limited information available to the Group, together with an assessment of their relevance to the Group's long term strategic plans.

At 31 December 2022, it is estimated that an increase/(decrease) of 10% (2021: 10%) in the relevant stock market index (for listed investments), the price/earning or price/book value ratios of comparable listed companies (for unquoted investments) as applicable, with all other variables held constant, would have increased/(decreased) the Group's profit after tax (and retained earnings) and fair value reserve (non-recycling) of consolidated equity as follows:

		2022			2021	
		Effect on profit after tax and retained earnings RMB'000	**Effect on fair value reserve (non-recycling) RMB'000**		Effect on profit after tax and retained earnings RMB'000	Effect on fair value reserve (non-recycling) RMB'000
Changes in the relevant equity price risk variable:						
Increase	**10%**	**6,341**	**8,653**	10%	3,911	10,602
Decrease	**(10%)**	**(6,341)**	**(8,653)**	(10%)	(3,911)	(10,602)

The sensitivity analysis indicates the instantaneous change in the Group's profit after tax (and retained earnings) and fair value reserve (non-recycling) of consolidated equity that would arise assuming that the changes in the stock market index or other relevant risk variables had occurred at the end of the reporting period and had been applied to re-measure those financial instruments held by the Group which expose the Group to equity price risk at the end of the reporting period. It is also assumed that the Group's equity investments would change in accordance with the historical correlation with the relevant stock market index or the relevant risk variables, and that all other variables remain constant. The analysis is performed on the same basis for 2021.

(Expressed in Renminbi unless otherwise indicated)

34 Financial risk management and fair values of financial instruments (continued)

(f) Fair value measurement

(i) Financial assets measured at fair value

Fair value hierarchy

The following presents the fair value of the Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in IFRS 13, *Fair value measurement*. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.
- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data is not available.
- Level 3 valuations: Fair value measured using significant unobservable inputs.

Analysis on fair value measurement of financial instruments are as follows:

	Fair value at 31 December 2022	Fair value measurement at 31 December 2022 categorised into		
		Level 1	Level 2	Level 3
Recurring fair value measurement				
Other financial assets:				
— Listed equity securities — SESH	76,764	76,764	–	–
— Listed equity securities — NEEQ	28,260	–	–	28,260
— Unlisted equity securities	2,620	–	–	2,620
— Unlisted units in investment funds	82,050	–	–	82,050
Financial assets at fair value through profit or loss:				
— Listed equity securities	1,041	1,041	–	–
Trade and other receivables:				
— Bills receivable	87,409	–	87,409	–

(Expressed in Renminbi unless otherwise indicated)

34 Financial risk management and fair values of financial instruments (continued)

(f) Fair value measurement (continued)

(i) Financial assets measured at fair value (continued)

Fair value hierarchy (continued)

	Fair value at 31 December 2021	Fair value measurement at 31 December 2021 categorised into Level 1	Level 2	Level 3
Recurring fair value measurement				
Other financial assets:				
— Listed equity securities — SESH	61,390	61,390	–	–
— Listed equity securities — NEEQ	65,540	–	–	65,540
— Unlisted equity securities	6,240	–	–	6,240
— Unlisted units in investment funds	52,140	–	–	52,140
Financial assets at fair value through profit or loss:				
— Listed equity securities	1,651	1,651	–	–
Trade and other receivables:				
— Bills receivable	133,219	–	133,219	–

During the years ended 31 December 2022 and 2021, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

The fair values of the bills receivable have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The fair values have been assessed to be approximate to their carrying amounts.

Fair value of the equity securities listed on the NEEQ, which do not have quoted prices in active markets, and that of unlisted equity securities and unlisted units in investment funds mentioned in Note 21 is determined using the price/earning or price/book value ratios of comparable listed companies adjusted for lack of marketability discount. The fair value measurement is negatively correlated to the discount for lack of marketability.

	Valuation techniques	**Significant unobservable inputs**	**Range of unobservable inputs**
Equity securities listed on the NEEQ and unlisted equity securities	Market comparable companies	Discount for lack of marketability	32%

34 Financial risk management and fair values of financial instruments (continued)

(f) Fair value measurement (continued)

(i) Financial assets measured at fair value (continued)

Fair value hierarchy (continued)

The movements during the year in the balance of these Level 3 fair value measurements are as follows:

	2022 RMB'000	2021 RMB'000
Unquoted equity securities and units in investment fund:		
At 1 January	**123,920**	81,210
Payment for purchase of other financial assets	**25,000**	16,000
Proceeds from disposal of other financial assets	**–**	(282)
Net unrealised gains recognised in other comprehensive income during the year	**(40,900)**	15,490
Unrealised fair value changes of other financial assets during the year	**4,910**	11,502
At 31 December	**112,930**	123,920

Any gains or losses arising from the remeasurement of the Group's listed and unlisted equity securities held for strategic purposes are recognised in the fair value reserve (non-recycling) in other comprehensive income. Upon disposal of equity securities, the amount accumulated in other comprehensive income is transferred directly to retained earnings.

(ii) Fair value of financial assets and liabilities carried at other than fair value

All financial instruments measured at other than fair value are carried at cost or amortised cost that were not materially different from their fair values as at 31 December 2022 and 31 December 2021.

35 Commitments

Capital commitments outstanding as at 31 December 2022 not provided for in the consolidated financial statements were as follows:

	2022 RMB'000	2021 RMB'000
Contracted for: — acquisition of property, machinery and equipment	**58,268**	138,169
Authorised but not contracted for: — acquisition of property, machinery and equipment	**210,718**	883,918

36 Material related party transactions

(a) Key management personnel remuneration

Remuneration for key management personnel of the Group, including amounts paid to the Company's directors as disclosed in Note 10 and the highest paid employees as disclosed in Note 11, is as follows:

	2022 RMB'000	2021 RMB'000
Salaries, allowances and benefits in kind	**5,214**	4,765
Discretionary bonuses	**2,470**	2,870
Contributions to retirement benefit schemes	**65**	56
	7,749	7,691

Total remuneration is included in "staff costs" (see Note 8(b)).

(b) Transactions with related companies

The Group has transactions with a company controlled by Mr. Zhu Xiaokun, one of the controlling shareholders ("Company controlled by Mr. Zhu Xiaokun"), Tianguan Precision prior to the business combination as disclosed in Note 38, a company controlled by Mr. Zhu Zefeng, one of the controlling shareholders ("Company controlled by Mr. Zhu Zefeng"), associates and joint ventures. The following is a summary of principal related party transactions carried out by the Group with these related parties for the years presented.

36 Material related party transactions (continued)

(b) Transactions with related companies (continued)

(i) Significant related party transactions

	2022 RMB'000	2021 RMB'000
Sale of goods to:		
Joint ventures	**486,074**	391,794
Associates	**387,782**	407,344
	873,856	799,138
Purchase of goods from:		
Associates	**183**	1,852
Purchase of service from:		
A joint venture	**516**	–
Rental income from:		
An associate	**–**	142
Acquisition of the equity interest in Tianguan Precision from:		
Company controlled by Mr. Zhu Zefeng	**276,000**	–

The directors of the Company are of the opinion that the above transactions with related parties were conducted in the ordinary course of business and on normal commercial terms or in accordance with the terms of the agreements governing such transactions.

(ii) Significant related party balances

	2022 RMB'000	2021 RMB'000
Trade and other receivables due from:		
Joint ventures	**472,116**	424,813
Associates	**132,393**	65,846
	604,509	490,659
Trade and other payables due to:		
Associates	**775**	361

37 Company-level statement of financial position

	2022 RMB'000	2021 RMB'000
Non-current assets		
Property, plant and equipment	**11**	11
Interest in subsidiaries	**1,708,481**	1,833,854
Interest in associates	**14,934**	3,034
Other receivables	**11,774**	11,343
	1,735,200	1,848,242
Current assets		
Other receivables	**182,038**	–
Cash and cash equivalents	**11,897**	9,780
	193,935	9,780
Current liabilities		
Interest-bearing borrowings	**173,402**	–
Other payables	**2,374**	2,185
	175,776	2,185
Net current assets	**18,159**	7,595
Net assets	**1,753,359**	1,855,837
Capital and reserves		
Share capital	**49,231**	49,399
Reserves	**1,704,128**	1,806,438
Total equity	**1,753,359**	1,855,837

38 Business combination

During the year ended 31 December 2022, the Group entered into several share purchase agreements to acquire equity interest of below subsidiaries. Details of the acquired subsidiaries are as follows:

Name of the company	Voting rights/ effective equity interests	Acquisition date	Principal activities
Tianguan Precision (Note(a))	100%/100%	30 August 2022	Research and development, manufacture and sale of cutting tools related products
Tiangong Solomon (Note(b))	55%/55%	28 October 2022	Manufacture and sale of titanium related products

(a) Acquisition of Tianguan Precision

On 19 August 2022, Precision Tools, a wholly owned subsidiary of the Group conditionally agreed to acquire 100% of entire equity interest in Tianguan Precision, which is principally engaged in manufacturing and selling of high-end cutting tools at a cash consideration of RMB276,000,000. The Group believes that the acquisition will further promote the growth of the Group's business and profitability. The acquisition was completed on 30 August 2022 and since then Tianguan Precision became a subsidiary of the Group.

(i) Set forth below is the calculation of goodwill

	RMB'000
Total consideration	276,000
Less: fair value on acquisition	(153,359)
Goodwill (Note 17)	122,641

38 Business combination (continued)

(a) Acquisition of Tianguan Precision (continued)

(ii) Fair value on acquisition

The following table summarises the estimated fair value of the assets acquired and liabilities assumed as at the acquisition date:

	Fair value on acquisition date RMB'000
Property, plant and equipment	171,937
Lease prepayments (Note 15)	34,986
Intangible assets (Note 16)	44,500
Trade and other receivables	5,593
Cash and cash equivalents	3,152
Inventories	5,058
Trade and other payables	(53,630)
Interest-bearing borrowings	(45,000)
Deferred tax liabilities (Note 32(c))	(13,237)
Identifiable net assets	153,359
Satisfied by:	
Cash consideration paid	276,000

The fair value of net identifiable assets of the acquiree is determined by the directors of the Company with reference to the valuation performed by an independent valuation firm on the acquisition date.

From the date of acquisition to 31 December 2022, Tianguan Precision contributed revenue of RMB25,976,000 and net profit of RMB10,969,000.

The consolidated revenue and net profit of the Group for the year ended 31 December 2022 would have been RMB5,071,524,000 and RMB525,664,000, respectively had the acquisition been completed as at 1 January 2022.

38 Business combination (continued)

(b) Acquisition of Tiangong Solomon

On 12 October 2022, the Group, through its wholly owned subsidiary TG Tech, entered into an agreement with a third party and acquired additional 25% equity interest of Tiangong Solomon through additional capital injection of RMB15,000,000. The Group believes this acquisition is in line with its development strategies and will bring long-term and strategic benefits to the Group. Upon the completion of the transaction on 28 October 2022, the Group held 55% equity interest in Tiangong Solomon and Tiangong Solomon became a subsidiary of the Group.

The following table summarises the estimated fair value of the assets acquired and liabilities assumed as at the acquisition date:

	Fair value on acquisition date RMB'000
Property, plant and equipment	317
Trade and other receivables	2,225
Cash and cash equivalents	27,395
Trade and other payables	(77)
Identifiable net assets	29,860
Less:	
Non-controlling interest, based on proportionate interest in the recognised assets of identified net assets	(13,437)
Group's share of net assets of Tiangong Solomon	16,423
Satisfied by:	
Cash consideration through capital injection	15,000
Carrying amount of interest in Tiangong Solomon prior to business combination	1,423
Total consideration	16,423

The values of net identifiable assets recognised on acquisition are their estimated fair values.

From the date of acquisition to 31 December 2022, Tiangong Solomon contributed revenue of RMB1,695,000 and net profit of RMB723,000.

The consolidated revenue and net profit of the Group for the year ended 31 December 2022 would have been RMB5,068,428,000 and RMB523,974,000, respectively had the acquisition been completed as at 1 January 2022.

(Expressed in Renminbi unless otherwise indicated)

39 Immediate and ultimate controlling parties

At 31 December 2022, the directors of the Company consider the immediate parents of the Group to be Tiangong Holding Company Limited, which is incorporated in the British Virgin Islands and Sky Greenfield Investment Limited, which is incorporated in the Cayman Islands. Both entities do not produce financial statements available for public use.

At 31 December 2022, the directors of the Company consider the ultimate controlling parties of the Group to be Mr. Zhu Xiaokun, Ms. Yu Yumei and Mr. Zhu Zefeng.

40 Non-adjusting events after the reporting period

After the end of the reporting period, the directors of the Company proposed a final dividend. Further details are disclosed in Note 33(b).

41 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2022

Up to the date of issue of these financial statements, the IASB has issued a number of new or amended standards, which are not yet effective for the year ended 31 December 2022 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
IFRS 17, *Insurance contracts*	1 January 2023
Amendments to IAS 1, *Presentation of financial statements: Classification of liabilities as current or non-current*	1 January 2023
Amendments to IAS 1, *Presentation of financial statements* and IFRS Practice Statement 2, *Making materiality judgements: Disclosure of accounting policies*	1 January 2023
Amendments to IAS 8, *Accounting policies, changes in accounting estimates and errors: Definition of accounting estimates*	1 January 2023
Amendments to IAS 12, *Income Taxes: Deferred tax related to assets and liabilities arising from a single transaction*	1 January 2023
Amendments to IFRS 10 and IAS 28, *Sales or Contribution of Assets between an Investor and its Associate or Joint Venture*	Available for optional adoption/effective date deferred indefinitely

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.

FINANCIAL INFORMATION SUMMARY

	Year ended 31 December				
	2022	2021	2020	2019	2018
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Revenue	**5,066,807**	5,744,873	5,220,944	5,369,873	5,021,546
Profit before taxation	**519,360**	751,655	621,817	450,371	280,568
Income tax	**4,750**	(80,025)	(81,495)	(46,353)	(13,598)
Profit for the year	**524,110**	671,630	540,322	404,018	266,970
Other comprehensive (loss)/income for the year	**(80,721)**	12,344	1,955	14,360	(11,607)
Attributable to:					
Equity shareholders of the Company	**422,697**	676,701	538,979	409,452	247,228
Non-controlling interests	**20,692**	7,273	3,298	8,872	8,135
Earnings per share (RMB)					
Basic (RMB)	**0.181**	0.244	0.209	0.156	0.106

	As at 31 December				
	2022	2021	2020	2019	2018
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Assets					
Non-current assets	**5,444,214**	4,803,513	4,588,826	4,261,913	3,923,593
Current assets	**7,918,937**	7,761,073	6,609,300	5,954,464	6,112,759
Total assets	**13,363,151**	12,564,586	11,198,126	10,216,377	10,036,352
Liabilities					
Non-current liabilities	**1,142,336**	1,188,397	750,952	764,909	1,011,943
Current liabilities	**5,079,482**	4,483,632	4,806,865	4,248,334	4,201,449
Total liabilities	**6,221,818**	5,672,029	5,557,817	5,013,243	5,213,392
Equity					
Total equity	**7,141,333**	6,892,557	5,640,309	5,203,134	4,822,960

Note: The results of the Group for the four financial years ended 31 December 2018, 2019, 2020 and 2021 and its assets and liabilities were extracted from previous annual reports, which also set forth the details of the basis of presentation of the combined accounts.

CORPORATE INFORMATION

Registered Name
Tiangong International Company Limited

Chinese Name
天工國際有限公司

Stock Code
Hong Kong Stock Exchange: 826

Board of Directors
Executive Directors
Mr. Zhu Xiaokun (Chairman)
Mr. Wu Suojun
Mr. Yan Ronghua
Mr. Jiang Guangqing

Independent Non-executive Directors
Mr. Gao Xiang
Mr. Lee Cheuk Yin, Dannis
Mr. Wang Xuesong

Company Secretary
Mr. Lee Johnly

Authorized Representatives
Mr. Lee Cheuk Yin, Dannis
Mr. Lee Johnly

Audit Committee
Mr. Lee Cheuk Yin, Dannis *(Chairman)*
Mr. Gao Xiang
Mr. Wang Xuesong

Remuneration Committee
Mr. Wang Xuesong *(Chairman)*
Mr. Zhu Xiaokun
Mr. Gao Xiang
Mr. Lee Cheuk Yin, Dannis

Nomination Committee
Mr. Gao Xiang *(Chairman)*
Mr. Zhu Xiaokun
Mr. Wang Xuesong
Mr. Lee Cheuk Yin, Dannis

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Industrial and Commercial Bank of China Limited
Bank of China Limited
Agricultural Bank of China Limited
The Export-import Bank of China
The Hongkong and Shanghai Banking Corporation Limited

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