天工國際有限公司*

TIANGONG INTERNATIONAL COMPANY LIMITED

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

ANNUAL REPORT
2021

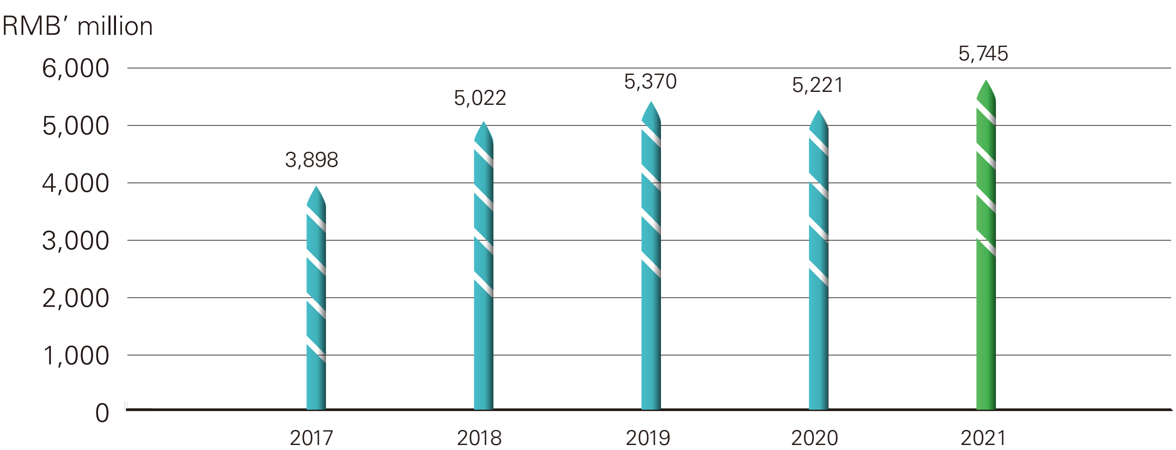
* *For identification purpose only*

CONTENTS

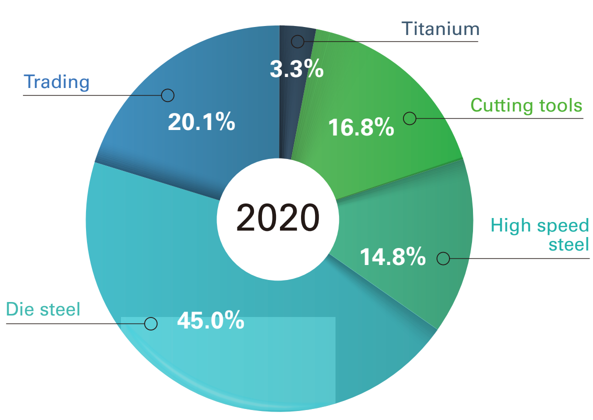
FINANCIAL HIGHLIGHTS

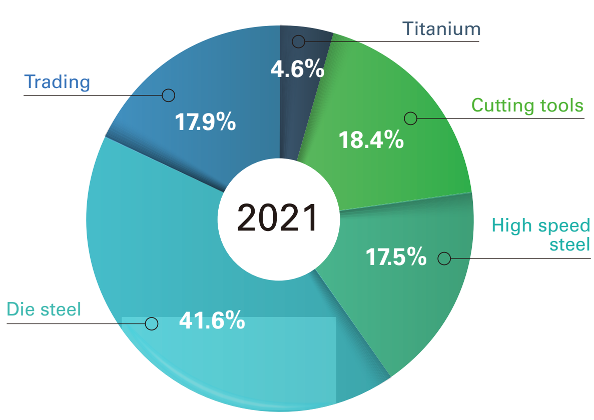
	2021	2020
Revenue (RMB'000)	**5,744,873**	5,220,944
Net profit for the year attributable to equity shareholders of the Company (RMB'000)	**664,371**	537,024
Basic earnings per share (RMB)	**0.244**	0.209
Proposed final dividend per share (RMB)	**0.0594**	0.0732

Revenue



Revenue by Product Mix





CHAIRMAN'S STATEMENT

In a business environment full of challenges, the Group powered forward to further consolidate our world-leading position in the field of new materials and high-end manufacturing, by successfully seizing the market opportunity of import substitution, dismantling the international monopoly through groundbreaking technological achievements, strengthening our domestic leading position; and achieving rewarding results for the year.

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 2021.

In 2021, the raging Novel Coronavirus (COVID-19) pandemic remained drastic across the globe while the pandemic in some regions of the world fluctuated with the emergence of Covid variants. The macro environment was evolving and loomed by uncertainties. However, with increasing vaccination rate around the world, more and more countries have relaxed their prevention measures to expedite the pace of economic recovery in order to bail out from the economy hardship. According to the Global Trade Update released by the United Nations Conference on Trade and Development, world trade in goods reached US$28.5 trillion in 2021, representing an increase of 25% over 2020 and an increase of 13% over 2019. Given the stabilized pandemic as compared to other regions, the growth in trade exports of China topped the world. In addition, as the domestic demand grew under the new development strategy of domestic-international dual circulation with focus on domestic economic cycle, the manufacturing industry in China saw satisfactory performance under such new economic situation. With continued economic growth in China, the Gross Domestic Product (GDP) grew by 8.1% in 2021 as compared to last year, setting a good beginning of the "14th Five-Year" Plan.

CHAIRMAN'S STATEMENT

Benefited from the continued recovery of domestic and overseas manufacturing industries, the Group's sales recorded a steady growth. In 2021, the revenue increased by 10.0% from RMB5,220,944,000 in 2020 to RMB5,744,873,000. The pent-up demand was released with the resumption of operation and production in the overseas markets, which strongly supported activities of the manufacturing industry, resulting in a robust demand for high speed steel ("HSS") and cutting tools, and realizing a rapid growth in export sales volume of the four core businesses of the Group. In 2021, the Group continued to promote the transformation of high-end products, upgrade the product structure and increase the proportion of high-end products. In particular, driven by the results of powder metallurgy products with high gross profit, cutting tools and carbide, coupled with timely transfer of cost, overall gross profit margin of the Group increased by 1.2 percentage points from 23.3% in 2020 to 24.5%, which continued to enhance its profitability.

According to the latest world ranking of HSS and die steel ("DS") released by the world's authoritative SMR Steel and Metal Market Research, the Group achieved the ambitious goal of ranking as the first in the world in terms of tools steel products output in 2020. 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 24 consecutive years.

In May 2021, the Group successfully conducted a share placement of 200 million shares, the net proceeds raised of HKD834 million, is to be used to expand the Rojana Rayong Pluak Daeng Industrial Park in Thailand, develop new precision tools products and replenish working capital to accelerate the deployment of high-end market.

In terms of production capacity of tools steel, the Group actively strengthened the research and development of high-end tools steel, targeting high-end tools steel products, including HSS and DS. After the completion of the "50,000 Tons Tools Steel Capacity Expansion Project", the Group has an annual production capacity of 300,000 tons of tools steel, effectively enhancing the competitiveness of the Group's products.

Looking ahead, under the major objectives of the "14th Five-Year" Plan, namely continuously promoting the structural transformation of steel industry, enhancing intelligence and low-carbon and green development, etc., the Group will continue to take advantage of our industry-pioneering and professional equipment, technology and management to lead the development of the industry. While reducing cost and enhancing efficiency, the Group will optimize the production process and promote the R&D capability of solving "bottleneck" problems of the industry, so as to make contributions to achieving national high-tech self-reliance and self-strengthening for the development of the industry.

Zhu Xiaokun
Chairman

MANAGEMENT
DISCUSSION & ANALYSIS

MANAGEMENT DISCUSSION AND ANALYSIS

Business review

Revenue	For the year ended 31 December 2021 RMB'000	%	2020 RMB'000	%	Change RMB'000	%
DS	**2,391,914**	**41.6**	2,351,218	45.0	40,696	1.7
HSS	**1,005,436**	**17.5**	775,501	14.8	229,935	29.6
Cutting tools	**1,057,984**	**18.4**	875,166	16.8	182,818	20.9
Titanium alloy	**263,146**	**4.6**	170,474	3.3	92,672	54.4
Trading of goods	**1,026,393**	**17.9**	1,048,585	20.1	(22,192)	(2.1)
	5,744,873	**100.0**	5,220,944	100.0	523,929	10.0

DS – accounted for 41.6% of the Group's revenue in FY 2021

	For the year ended 31 December 2021 RMB'000	%	2020 RMB'000	%	Change RMB'000	%
DS						
Domestic	**1,216,376**	**50.9**	1,590,257	67.6	(373,881)	(23.5)
Export	**1,175,538**	**49.1**	760,961	32.4	414,577	54.5
	2,391,914	**100.0**	2,351,218	100.0	40,696	1.7

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.

Driven by the increased vaccination rates in 2021, global economy rebounded significantly, especially in high-income and mid-income countries. China's exports were stimulated by rapid recovery of the manufacturing industries in Europe and North America. These contributed to the increased overseas demand for DS. As a result, the Group's export revenue increased by 54.5% to RMB1,175,538,000 (2020: RMB760,961,000).

While China's manufacturing industries having maintained steady growth, the Group has made a strategic move during the reporting period and concentrated its production capacity to meet the rapidly growing export demand. Domestic revenue recorded a decrease of 23.5% to RMB1,216,376,000 (2020: RMB1,590,257,000).

Overall, sales of the DS segment remained relatively stable at RMB2,391,914,000 (2020: RMB2,351,218,000).

HSS – accounted for 17.5% of the Group's revenue in FY 2021

	For the year ended 31 December					
	2021		2020		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
HSS						
Domestic	**570,361**	**56.7**	535,339	69.0	35,022	6.5
Export	**435,075**	**43.3**	240,162	31.0	194,913	81.2
	1,005,436	**100.0**	775,501	100.0	229,935	29.6

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.

As mentioned before, most factories in Europe and North America resumed operations gradually after the extensive rollout of vaccination programs. As an important material for various manufacturing industries, overseas demand for HSS increased in 2021.

HSS export revenue increased significantly by 81.2% to RMB435,075,000 in 2021 (2020: RMB240,162,000).

Domestic demand for HSS maintained a steady growth and revenue from the domestic market increased by 6.5% to RMB570,361,000 (2020: RMB535,339,000).

Overall revenue of HSS in 2021 increased by 29.6% to RMB1,005,436,000 (2020: RMB775,501,000).

Cutting tools – accounted for 18.4% of the Group's revenue in FY 2021

	For the year ended 31 December					
	2021		2020		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
Cutting tools						
Domestic	**285,420**	**27.0**	256,637	29.3	28,783	11.2
Export	**772,564**	**73.0**	618,529	70.7	154,035	24.9
	1,057,984	**100.0**	875,166	100.0	182,818	20.9

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.

With the recovery of global manufacturing industries, growth was recorded in both domestic and export revenue of cutting tools.

In addition to the recovery of overseas manufacturing industries, DIY demand on cutting tools in North America remained strong in 2021. Driven by demand from both civil and industrial sectors, export revenue increased by 24.9% to RMB772,564,000 (2020: RMB618,529,000).

In domestic market, demand mainly was driven by the industrial sector. Increased usage of computer numerical control ("CNC") machine tools in various production process boosted the demand of high-end cutting tools. Domestic revenue increased by 11.2% to RMB285,420,000 (2020: RMB256,637,000).

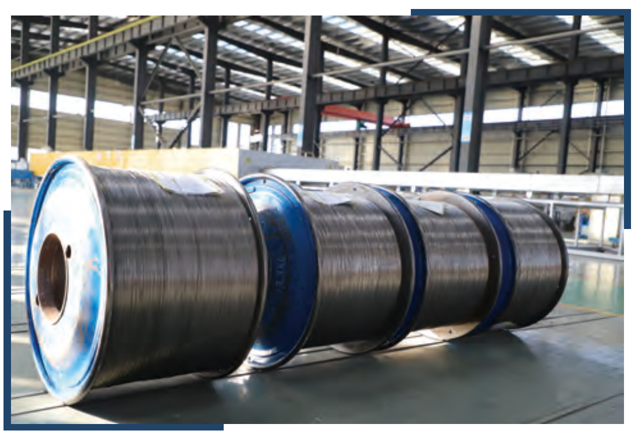
Titanium alloy – accounted for 4.6% of the Group's revenue in FY 2021

	For the year ended 31 December					
	2021		2020		Change	
	RMB'000	**%**	RMB'000	%	RMB'000	%
Titanium alloy						
Domestic	**260,095**	**98.8**	168,026	98.6	92,069	54.8
Export	**3,051**	**1.2**	2,448	1.4	603	24.6
	263,146	**100.0**	170,474	100.0	92,672	54.4

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.

In 2021, demand for titanium alloy from downstream enterprises has gradually improved after sustained recovery of the domestic economy. Sales volume increased by 50.5% while average selling price increased by 2.6%. Overall revenue, therefore, increased by 54.4% to RMB263,146,000 (2020: RMB170,474,000).

The domestic titanium industry underwent structural adjustment in 2020. Titanium application development towards high-end consumption, including aerospace, marine engineering, high-end chemical industry and sports and leisure, had achieved strong results. The Group's titanium alloy products have obtained the Quality Management System for Aerospace Certification issued by Bureau Veritas, an international authoritative quality certification body. Titanium alloys have also been listed as key strategic materials whose application is expected to be vigorously promoted. The Group is confident that by devoting into the research and development of titanium application, acceptance of the Group's products will be further enhanced. The Group is also focused on transformation and upgrading of titanium products from billets to finished products.



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 in 2021, the business volume of commodity trading continued to decrease.

Financial review

Net profit attributable to equity shareholders of the Company increased by 23.7% from RMB537,024,000 in 2020 to RMB664,371,000 in 2021. The increase was mainly attributable to (i) increased gross profit margin of the Group's products; (ii) increased government grants received for encouraging technological innovation and rewarding contributions to the local economy and (iii) partially offset by increased distribution expenses as a result of increased sales to overseas markets.

Revenue

Revenue of the Group for 2021 totalled RMB5,744,873,000, representing an increase of 10.0% when compared with RMB5,220,944,000 in 2020. The increase was mainly caused by the increase in revenue from HSS, cutting tools and titanium alloy segments, ranging from 20.9% to 54.4%. DS segment remained stable. The total revenue from the four major production segments increased by 13.1% to RMB4,718,480,000 (2020: RMB4,172,359,000). For the analysis of individual segments, please refer to the "Business Review" section.

Cost of sales

The Group's cost of sales was RMB4,339,675,000 in 2021, representing an increase of 8.3% as compared with RMB4,006,964,000 in 2020, as a result of the increase in revenue.

Gross margin

In 2021, the overall gross margin was 24.5% (2020: 23.3%). Set out below are the gross margin of the five segments of the Group in 2021 and 2020:

	2021	2020
DS	**26.6%**	28.1%
HSS	**32.5%**	28.1%
Cutting tools	**28.4%**	18.9%
Titanium alloy	**16.0%**	18.2%
Trading of goods	**0.03%**	0.04%

DS

In May 2021, the export VAT rebate on DS has been cancelled, thereby reducing the gross margin of DS. As a result, the gross margin of DS decreased from 28.1% in 2020 to 26.6% in 2021.

HSS

The gross margin of HSS increased from 28.1% in 2020 to 32.5% in 2021. The increase was mainly due to an increase in the proportion of high-end products and powder metallurgy products with higher gross margin.

Cutting tools

The gross margin of cutting tools increased from 18.9% in 2020 to 28.4% in 2021. The increase was mainly due to the combined effect of: (i) an increase in production quantity which resulted in a lower average fixed cost per unit; and (ii) increased proportion of high-end tap and milling cutter products which contributed to a higher gross margin.

Titanium alloy

The gross margin of titanium alloy segment decreased from 18.2% in 2020 to 16.0% in 2021. As the price of sponge titanium rose in a short period of time, which in turn extruded the gross margin of titanium alloy.

Trading of goods

The gross margin of this segment decreased from 0.04% in 2020 to 0.03% in 2021.

Other income

Other income increased from RMB70,429,000 in 2020 to RMB129,387,000 in 2021. The increase was mainly attributable to an increase in government grants received for encouraging technological innovation and rewarding contributions to the local economy and a net realised and unrealised gains on other financial assets.

Distribution expenses

Distribution expenses in 2021 was RMB217,737,000 (2020: RMB87,489,000). Notwithstanding the resumption of export sales to Europe and North America after the recovery of manufacturing industries, freight and related logistics expenses increased compared to 2020. Tight supply of overseas freight services during the year added further burden to the distribution cost. In 2021, distribution expenses amounted to approximately 3.8% of revenue (2020: 1.7%).

Administrative expenses

Administrative expenses increased from RMB105,963,000 in 2020 to RMB134,575,000 in 2021. The increase was mainly attributable to (i) local government exempted social insurance contribution during the outbreak of COVID-19 in 2020 which was not available in 2021; (ii) organisation of 40th anniversary ceremony event; and (iii) increased sewage charges for complying with new environmental policy. In 2021, administrative expenses amounted to approximately 2.3% of revenue (2020: 2.0%).

Other expenses

Other expenses increased from RMB35,424,000 in 2020 to RMB47,274,000 in 2021.

During the year, 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.

Additional impairment provision of RMB5,318,000 was provided according to the credit loss estimation policy of the Group.

Further to the above, additional charitable donations of RMB2,610,000 were made in 2021. Most of these charitable donations related to assistance against the COVID-19.

Net finance costs

In 2021, the Group incurred lower interest expenses with the decrease in average loan balance and lower interest cost. However, as compared to 2020, additional interest expenses were incurred on other financial liability related to the equity interest in TG Tools invested by certain third party investors. Therefore, the Group's net finance costs increased by 3.3% to RMB131,484,000 (2020: RMB127,309,000).

Income tax

As set out in Note 8 of the consolidated statement of profit or loss, the Group's income tax expense decreased by 1.8% from RMB81,495,000 in 2020 to RMB80,025,000 in 2021. It was mainly due to the additional tax deduction for research and development expenses in 2021.

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 increased by 23.7% from RMB537,024,000 in 2020 to RMB664,371,000 in 2021. The margin of profit attributable to equity shareholders of the Company increased from 10.3% in 2020 to 11.6% in 2021.

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

In 2021, total comprehensive income for the year attributable to equity shareholders of the Company was RMB676,701,000 (2020: RMB538,979,000) 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 RMB12,086,000 (2020: debited RMB6,795,000) related to translation of financial statements of Hong Kong subsidiaries and overseas equity accounted investees.

The Group also recognised a fair value gain in the consolidated statement of profit or loss and other comprehensive income of RMB24,430,000 (2020: loss of RMB4,840,000) 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., 寧波梅山保稅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)*) and Ji'nan Financial Fosun Weishi Equity Investment Fund Partnership (Limited Partnership). All of these investments were stated at their fair value as at 31 December 2021. Other than the fair value gain, net of tax, of RMB24,430,000 (2020: loss of RMB4,840,000) recorded in the other comprehensive income in 2021, the fair value gain of RMB11,502,000 was recorded in other income (2020: loss of RMB1,892,000 recorded in other expenses) for financial assets measured at fair value through profit or loss during the year.

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Trade and bills receivables

Trade and bills receivables decreased from RMB2,017,167,000 in 2020 to RMB1,883,334,000 in 2021, which was mainly due to persevering credit control over the receivables. During the year, loss allowance of trade and bills receivables decreased by RMB2,347,000. On average, the proportion of short-aged trade and bills receivable was higher compared to 2020.

Industry review

Marked as the beginning of the "14th Five-Year" Plan, the economic performance in 2021 was satisfactory with total economic volume exceeding RMB110 trillion. During the year, despite the impacts of unfavourable factors such as the pandemic and the flood, and under the pressure of affected supply and demand, China demonstrated strong resilience and made a good start.

The Chinese government has maintained regular pandemic prevention and control measures and targeted pandemic prevention and control measures to ensure a stable socio-economic development space and environment. In particular, supported by the government, the industrial production successfully dealt with a number of unfavourable factors with a continued momentum in overall recovery. In 2021, the added value of industries above designated size increased by 9.6% year-on-year. The utilisation rate of industrial production capacity reached 77.5% while the delivery value for export of industries above designated size increased by 17.7% year-on-year.

In terms of overseas markets, the economies reopened as many countries gradually relaxed their pandemic prevention measures such as lockdown, which released the pent-up demand for steel. Coupled with impacts of the surging international steel price and other factors, China's export of steel rebounded in 2021 after five consecutive years of decline. According to the Ministry of Industry and Information Technology, annual exports of steel totalled 66.90 million tons, representing a year-on-year increase 24.6%.

In general, under the promotion of industry transformation and the security and stability of the industrial chain and supply chain by China, the overall steel industry performed well in 2021, and the efficiency of the steel industry achieved historical success. The accumulated operating income of key large and medium-sized iron and steel enterprises in the year was RMB6.93 trillion, an increase of 32.7% year-on-year; the total accumulated profit was RMB 352.4 billion, increased by 59.7% year-on-year, hitting a record high; the sales profit margin reached 5.08%, a rise of 0.85 percentage points as compared to 2020.

Market review

Looking back at the DS market in 2021, against the backdrop of the low-carbon emission in China, the market demand in the second half of 2021 was lower than expected, automobile production declined and home appliances and other manufacturing industries were relatively weak, thus the demand for DS was mediocre. However, for the overseas markets, gradual opening of Europe and the United States and other economies stimulated the demand for DS.

Cutting tools are the main application market for HSS and some alloy steel. In recent years, the transformation and upgrading of the manufacturing industry and the improvement of mechanical properties of processing materials have led to the increasing usage and proportion of advanced cutting materials, such as high-performance HSS and carbide. In addition, more and more downstream enterprises in China have used CNC machines for production, and the corresponding increase in consumer demand for high-end cutting tools has driven the demand for high-end HSS. This has led to a continuous increase in the scale of the domestic cutting tool market. With the higher reliability requirements of high efficiency cutting and CNC tools from the market and the development of metallurgical technology, alloy HSS and ordinary HSS in the low-end market will be gradually eliminated, and high-performance HSS will see a broader development opportunity. According to the "The Economic Operation of the Machine Tool Industry in 2021" issued by the China Machine Tool & Tool Builders' Association, China's export of cutting tools increased by 34.9% to USD3.83 billion year-on-year, while export of metal-cutting machine tools increased by 32.7 % in 2021.

In terms of policy, China has introduced a series of policies to support the development of the special steel industry since 2015, including the inclusion of special steel products in the catalogue of new materials in the 13th Five-Year Plan for the Development of New Materials Industry, and the inclusion of HSS and DS in Made-in-China 2025 Plan, which focuses on the development of advanced basic materials. China has actively promoted the supply-side structural reform of the iron and steel industry, and achieved remarkable results in dealing with excess capacity, rationalizing the industrial structure. Green development, intelligent manufacturing and international cooperation have also made a progress, providing strong support for a healthy development of the society and economy. At the beginning of the "14th Five-Year" Plan, China continued to focus on solving the great pressure of excess capacity, enhancing the green and low-carbon development level and other issues in order to boost a higher quality development of the industry.

Accomplishments

According to the world ranking of HSS and DS (collectively known as alloy tool steel) released by the world's authoritative SMR Steel and Metal Market Research, the Group ranked first in the world in terms of alloy tool steel products output in 2020.

Moreover, HSS of TG Tools qualified for the Manufacturing Individual Champion Product Award in 2021 review.

As a well-known manufacturer of advanced basic materials such as HSS and DS, key strategic materials such as titanium alloy and precision cutting tools, which is a key development focus of China, the Group will further accelerate its transformation and upgrading strategy in 2021, ushering in the key strategic development period with the largest investment in high-tech projects since its establishment.

The 50,000-ton high alloy tool steel new material technology transformation and enhancement project has been completed by the end of 2021. The heavy-duty (7,000 tons) fast forging production line project, the second phase of powder metallurgy project, the second phase of Thailand project, intelligent powder metallurgy tap project and carbide cutting tool project are all under orderly planning and implementation.

In order to meet the needs of business development and maintain capital flexibility, the Group conducted a share placement of 200 million shares in May 2021 in a top-up placement, of which approximately half of the net proceeds of about HKD834 million will be used to expand the Group's industrial park in Thailand and develop new precision tools products, while the remaining net proceeds are intended as general working capital.

The Group's plant in the Rojana Rayong Pluak Daeng Industrial Park, Rayong, Thailand, was completed in September 2020 and commenced mass production in the first quarter of 2021. It is the Group's first highly automated overseas factory for cutting tools, with a current annual production capacity of 48 million pieces. The factory adopted fully automatic production lines, which enables it to achieve higher production efficiency and flexible expansion. The design capacity of 4 million pieces per month was fully achieved during the year.

As for new precision tools, the Group is committed to the research and development of carbide and powder metallurgy taps. Currently, China's carbide products are of middle and low-grade and difficult to meet the needs of the domestic high-end manufacturing industry. Therefore, high-end carbide CNC blades and other high-tech, high value-added carbide products have to be imported from abroad, while the application and demand for powder metallurgy taps continue to increase because of its excellent performance. The Group's research and development of carbide and powder metallurgy taps will bring enormous benefits to the Group and the special new materials industry in China.

In April 2021, TG Tools formally kicked-off the A-share spin-off listing plan, marking 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 tool steels, whose production processes include conventional metallurgy and powder metallurgy.

Future outlook

Operation Strategy

The Group has led the industry with its professional equipment, technology and management advantages, focusing on research and development and cost control for many years, in order to meet the domestic market demand as well as gain international market share.

Precise strategic layout, efficient execution ability and world-leading technology are the three core pillars of the Group. Looking back at the past year, the Group continued to implement the development strategy of high-quality transformation, continuously overcame the difficulties of smelting technology through industry-leading research and development capabilities, and strived to optimize the production process and product structure. With excellent products, the Group promoted the direct sales strategy to deeply bind high-quality customers. In addition, by virtue of its leading industry position and pioneering advantages in China, the Group will actively extend the industrial supply chain and increase the added value of products to manifest their true value.

Domestic industry development

Currently, China is still in a stable period of economic recovery after the pandemic. Enterprises are pursuing cost reduction and efficiency enhancement and are actively improving production efficiency to match the national pace. Among them, the steel and special new materials industry continued to record a simultaneous increase in production capacity and output, triggering a rapid rise in commodity prices. Since the beginning of the year, prices of the Group's alloy tool steel products have also risen consecutively due to the rising prices of raw materials such as scrap steel and rare metals.

China will continue to promote the development of steel industry during the "14th Five-Year" plan. In February 2022, Ministry of Industry and Information Technology, National Development and Reform Commission and Ministry of Ecology and Environment published Guiding Opinions on Promoting the High-Equality Development of Steel Industry, which proposed that by 2025, we should strive to achieve basic high-quality development model of the steel industry, which has a reasonable layout structure, stable supply of resources, advanced technology and equipment, outstanding quality brands, high intelligence level, strong global competitiveness and green, low-carbon and sustainable development.

Meanwhile, China has clarified the "30•60 Goals" early on. The Group continues to promote the innovation transformation of products to respond to national steel industry goals and the overall national strategy of carbon peaking and carbon neutrality. In order to keep pace with the market development speed, the "50,000 Tons Alloy Tool Steel Capacity Expansion Project" planned by the Group at the beginning of 2021 was completed before the end of year 2021. The project will mainly focus on high-end alloy tool steel products, including HSS and DS. After the project reaches its planned production capacity, the Group will have 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, so as to enhance the competitiveness of the Group's products.

As a pioneer in the industry, the Group will continue to be a dominant player in the field of alloy tool steel. As the cornerstone of the manufacturing industry, the Group will take tackling the "bottleneck" technology at the material end as its core task, actively making efforts to ensure the national security need of key special steel material and thriving to achieve key technology breakthroughs and sci-tech self-reliance and self-strengthening at higher levels.

Export operation

Under the prospect that America's inflation growth will continue to rise, Federal Reserve may raise interest rates several times in 2022. The tightening monetary policy stance puts pressure on RMB to depreciate, while exports are likely to be stimulated to increase. Other major overseas steel producing countries, including India and Japan, are facing volatile pandemic situations, which has affected the supply side to a certain extent, thus maybe benefiting China's steel exports. Meanwhile, various countries and regions including Europe and America had successively adopted the stance of "co-existing with the virus" and opened borders, resulting in a rebound of economy and demand, which also benefits China's exports.

Overseas expansion

Being adherent to promoting the globalization strategy, the current overseas layout of the Group is rather diversified, with approximately ten sales office established overseas. During the record year, plants in Rojana Rayong Pluak Daeng Industrial Park, Rayong, Thailand officially commenced its trial production in the first quarter of 2021, becoming an important starting point of overseas expansion. The plant's current production capacity for the first phase is 48 million pieces of cutting tools, while the second phase of the project is expected to finish by the end of 2022, adding 48 million pieces of production capacity, which makes a total of nearly 100 million pieces of production capacity. The Group hopes to continue optimizing and consolidating the current overseas layout in response to the recovery of overseas demand and global uncertain elements.

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, and development opportunities are enormous. The growth of China's powder metallurgy industry is also related to the development and application of new products, new materials, new processes and new equipment, as well as the continuous improvement and innovation of existing products and production processes.

In March 2018, the Group began to plan and prepare its first industrialised powder metallurgy production line in China. The production line with an annual capacity of 2,000 tons was officially completed and put into operation in November 2019, making the successful first step into the powder metallurgy industry. The Group began to gradually expand powder metallurgy production in 2021. Contract orders have increased significantly since then, and powder metallurgy has become a growth driver for the Group. The Group's distribution of powder metallurgy with a leading supplier of special steel products in Europe, which is also a business partner, has also achieved fruitful results.

The Group will continue to deepen the transformation of high-end products and make unremitting efforts to invest in the research and development of powder metallurgy. It is expected that the second phase of the powder metallurgy production line will be completed in 2022 as planned, with an additional annual production capacity of 3,000 tons. The total production capacity is expected to further increase to 5,000 tons. At the same time, with the increasing market demand for efficient cutting and CNC tools, it is expected that the proportion of powder metallurgy applications will further increase significantly. The Group is intensively promoting the manufacturing of powder metallurgy HSS cutting tools, including powder metallurgy taps and drill bits. It is expected 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 recent years, the Group has actively sought to upgrade its products and focused on the high-end carbide cutting tools market, 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.

Currently, the Group has formed a subsidiary with certain industry experts for the production of carbide, and has started to participate in the carbide cutting tools market from the raw material end.

Titanium Alloy Industry

Titanium wire made of titanium can be used in downstream scenarios such as eyeglass frames, 3D printing and 3C products. The Group will continue to explore the market for titanium wire by coordinating downstream customers to identify projects that can help them with better application. The Group hopes to move forward to the application scenarios of refined titanium alloys through more R&D application projects, open up downstream markets, and promote higher-quality development.

Marketing Strategy

The Group has been investing significant resources to expand its online sales channels. The Group's products are sold on a number of major e-commerce platforms around the world, including Alibaba, Amazon, eBay, JD.com and Tmall, which further drives the sales of cutting tools. During the pandemic, the e-commerce platforms sales have proved their significance.

The Group has also been cooperating with downstream heat treatment and cutting suppliers to improve its understanding of customer needs.

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 in building 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 payments, planning to resources, manufacturing to costs, and orders to deliveries. This system effectively improves the performance of network procurement, comprehensively enhances the synergy of the industrial supply chain, greatly enhances the competitiveness of the Group, and makes the best preparation for the transformation of the Group to an amoeba management model. In 2022, the Group's information engineering will focus on the Manufacturing Execution System (MES) by collecting more process and production data from factories, with a view to maintaining more accurate production information through the system, so as to better control costs.

After 14 months of successful completion of the first phase of the "Digital Tiangong" project, the second phase of the smart manufacturing project was officially launched in June 2021, which involved a wider range of departments and functions. The Group hopes to accelerate its plans in line with the strategic deployment of the construction of digital China by implementing comprehensive transformation and upgrade, and to lead the change and development of the industry. The Group will accelerate its digitalisation and smart development by gradually implementing informatization, in order to achieve comprehensive management, research and development, as well as overall production technology transformation and upgrades, and to lead the change and development of the industry.

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 2021, the Group's current assets included cash and cash equivalents of RMB1,356,881,000, inventories of RMB2,277,610,000, trade and other receivables of RMB2,131,259,000, pledged deposits of RMB244,191,000 and time deposits of RMB1,749,481,000. As at 31 December 2021, the interest-bearing borrowings of the Group were RMB2,638,786,000 (2020: RMB3,365,819,000), RMB1,600,786,000 of which was repayable within one year and RMB1,038,000,000 of which was repayable after more 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 2021, was 0.0% (2020: 43.6%).

After the placings of shares by TG Tools, part of the funds raised were used to repay the bank borrowings. As at 31 December 2021, borrowings of RMB1,757,700,000 were in RMB, USD65,487,367 were in USD, EUR61,942,110 were in EUR and HKD20,000,000 were in HKD. The borrowings of the Group were subject to interest payable at rates ranging from 0.76% to 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 RMB542,300,000 (2020: RMB1,307,414,000). The decrease was mainly attributable to: (i) ramp-up of inventories in anticipation of an imminent increase in demand in the first half of 2022; and (ii) settlement of trade and other payables made to suppliers near the year end.

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 2021 was 167 days (2020: 156 days). The increase in turnover days of inventory was mainly due to the stock up in preparation for expected sales growth in the first half in 2022 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 levels and sales forecasts.

The Group's turnover days of trade receivables for 2021 was 124 days (2020: 146 days) while the turnover days of trade payables for 2021 was 110 days (2020: 127 days).

Accordingly, the Group's cash conversion cycle for 2021 was 181 days (2020: 175 days). The turnover days figures of the Group were quite stable, reflecting tight control over the purchase, production and sales operations by the management. 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 2021, the Group's net increase in property, plant and equipment amounted to RMB136,820,000, which was mainly due to expenditure on production line of powder metallurgy and was financed by a combination of our internal cash resources, operating cashflows and bank borrowings. As at 31 December 2021, capital commitments were RMB1,022,087,000 (2020: RMB544,430,000), of which RMB138,169,000 (2020: RMB69,910,000) were contracted for and RMB883,918,000 (2020: RMB474,520,000) were authorised but not contracted for. The majority of the capital commitments related to the construction of heavy-duty (7,000 tons) fast forging machine production line and powder metallurgy tap production line, second phase of powder metallurgy project, the second phase of Thailand factory and carbide cutting tools project 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 HKD4.215 per share. The market price of the placing share was HKD4.88 per share as quoted on The Stock Exchange of Hong Kong Limited (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 Directors considered that the Placing represented an opportunity to raise capital for the Company, broaden its shareholder base, increase the liquidity of the shares, strengthen the capital base and to enhance the financial position and net assets base for the long-term development and growth of the Group.

The Directors believe that with the accelerated pace of transformation and upgrading of the PRC's manufacturing industry, as well as the rising standard of intelligent manufacturing and digital control equipment, high-end precision cutting tools has a promising prospect with a strong demand from the manufacturing industry. With the technological breakthroughs in cutting tools materials and the advantages of local technical guidance and after-sales service, the substitution of imported high-end precision cutting tools by the domestic ones has been gradually taking place. The Directors hope to use the opportunity of the Placing to advance the deployment of the Group's new products and production capabilities in the high-end precision cutting tools industry, so as to meet the growing demand in the future.

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 2021)	Proposed use of the remaining unutilised proceeds (as at 31 December 2021)
(i)	Expansion of the industrial park of the Group in Thailand	HK$19.9 million was used in the expansion of the industrial park of the Group in Thailand	The remaining unutilised proceeds was HK$40.0 million
(ii)	Development of the new precision tools products of the Group	HK$17.7 million was used in development of the new precision tools products of the Group	The remaining unutilised proceeds was HK$341.5 million
(iii)	Replenishment of Group's working capital to procure raw materials and meet any cashflow requirements that may arise from daily operations	HK$415.3 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 unutilised proceeds are expected to be fully utilised by 31 December 2022.

Foreign exchange exposure

The Group's revenues were denominated in RMB, USD and EUR, with RMB accounting for the largest portion of 58.5%. 41.5% 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 2021, the Group pledged certain bank deposits amounting to RMB244,191,000 (2020: RMB384,700,000) and certain trade receivables amounting to RMB175,195,000 (2020: RMB160,835,000). The decrease in pledged bank deposits was mainly due to the decrease in the outstanding balance of bank acceptance bills.

Material acquisition and disposal

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 2021, the Group employed 3,108 employees (2020: 3,008 employees). Total staff costs for the year amounted to RMB360,069,000 (2020: RMB267,114,000). The increase was mainly resulted from the increase in production output and cancellation of social insurance COVID-19 exemption policy by the local government. 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 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 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 35 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 74.03% 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 2021 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.

(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 & GOVERNANCE REPORT

1 About the Environmental, Social and Governance Report

1.1 Reporting Guideline

This is the sixth 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 2021.

The ESG Report has been prepared by the Company in accordance with the *Environmental, Social and Governance Reporting Guide* (the "ESG Guide") under Appendix 27 to the latest revised *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 2021* (the "Annual Report 2021") for a comprehensive understanding of the Group's ESG performance.

1.2 Reporting Scope

Unless otherwise stated, the organisational 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. The Group's automated cutting tool factory in Thailand has been officially put into production in May 2021 and is therefore included in the reporting scope of the ESG Report this year for the first time.

Unless otherwise stated, the reporting period of the ESG Report is consistent with that stated in the Annual Report 2021, which is from 1 January 2021 to 31 December 2021 (the "reporting period").

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 operating 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 the 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, the 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

The 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 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: tiangong@biznetvigator.com

2 Corporate Governance Integrated with ESG

2.1 ESG Governance Structure

The Board is the highest responsible body for the Group's ESG matters, 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-related matters, including ESG risks, and ensures 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 matters based on the actual situation of the Group to ensure the standardisation and implementation of relevant governance work.

In addition, in order 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 the head of the Office Administration, the Financial Controller and the head of the Securities Investment Department of the Company. The representatives of ESG-related departments of the Company and the interface persons of the subsidiaries are jointly appointed as members of the ESG Working Group. The main responsibilities of the ESG Working Group are to assist the Board to coordinate and supervise the implementation of the Group's ESG policies and ESG strategies, review and assess the progress of the completion of ESG development goals, continuously follow up the latest events and trends of sustainable development in the industry, and report material ESG issues and potential ESG risks to the Board. At the same time, the ESG Working Group regularly collects data and information related to ESG issues and assists in the preparation of the ESG report.

During the reporting period, the Group set a number of medium- and long-term ESG development goals through the comprehensive research, which were reviewed and approved by the Board. In the future, the Group will continue to improve its ESG governance system and enhance employees' sense of responsibility on ESG issues, so as to get prepared for the challenges and opportunities in ESG-related fields in the future.

2.2 ESG Risks

In order to further improve the Group's ESG governance, during the reporting period, the Group comprehensively evaluated and identified major ESG risks, providing an important reference for the targeted improvement of ESG management in the future. Firstly, the Group 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 the assessment based on the list of potential risks, prioritised relevant risks and finally identified material ESG risks.

During the reporting period, the Group's ESG risks were classified into five levels, among which, 3 ESG risks were at the "medium" level, 12 ESG risks were at the "low" level, and no risks were at the "high" or "very high" levels. In particular, the ESG risks at the "medium" level and their respective corresponding management status are as follows:

ESG Risks	Risk Description	Management Measures
Insufficient employee development and training	Unsatisfactory or substandard training will lead to waste of resources and affect the realisation of future strategic objectives due to the insufficient ability of employees, hinder the business development and is not conducive to the improvement of the corporate productivity.	➢ Implement the *Measures for the Administration of Induction Training for New Employees* to standardise 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 "Master-Apprentice" Programme* to standardise 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 for 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 environment. During the production process, hazardous substances such as dust and waste smoke are also produced, as a result 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 health of employees and 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 clearly 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 "General Manager – Head of SEP Department – Safety Officer" has been established; ➢ Implement the *Safety Training System*, which clearly 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 clearly stipulates the reporting time, process and content of safety production work of each department; ➢ 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; ➢ Implement the *Emergency Plan for the Prevention and Control of the Pandemic*, setting out the responsibilities and emergency measures for epidemic prevention and control of personnel at all levels; ➢ 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 comprehensive quality control 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 product quality: conducting sample inspections on raw materials; conducting strict quality inspections 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 *After-sales Services Management System* 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 attaches great importance to the concerns and demands of stakeholders, and believes that maintaining efficient and close communication with stakeholders is an important basis for achieving sustainable development. To this end, the Group reviews the stakeholders involved in all aspects of business operations and their potential impacts on the Group, identifies important stakeholder groups, and maintains the long-term and close contact with all stakeholders through various communication channels such as questionnaires, information disclosure, and meetings, and listens to their opinions and feedback on the Group's various sustainable development work.

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/ irregular	➢ 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	Regular/irregular	➢ Strictly abiding laws and regulations of the places of operation 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/monthly/ irregular/twice a year	➢ Continuously improving production management system ➢ Promoting scientific research and innovation to improve production quality and efficiency

Stakeholder Groups	Expectations	Communication Methods	Communication Frequency	Actions in Response
Employees	Employee rights and benefits Health and safety Promotion and training	Labour contracts Professional training Employee activities Employees' representatives conference	Regular/irregular	➢ 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
Suppliers and other business partners	Being fair and just Win-win cooperation	Contracts and agreements Supplier assessments Communication meetings	Annually/irregular	➢ Ensuring fair and transparent tendering and procurement process ➢ Fulfilling contracts and agreements
Communities	Community development Environmental protection	Community communication Charitable contribution Eco-friendly events	Regular/irregular	➢ Participating in harmonious community construction ➢ Actively carrying out charity donation activities ➢ Implementing environmental protection work

3.2 Materiality Assessment

In order to identify the most important ESG issues for the Group, the Group regularly conducts materiality assessment and continuously improves the working mechanism and methods of materiality assessment. In 2020, the Group engaged a professional consulting agency to conduct a materiality assessment in the form of the questionnaire. The assessment fully covers the Group's internal and external stakeholders. The assessment involves 5 steps, details of which are reviewed 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 2020 materiality assessment.

   ✓ The Board

   ✓ The Government

   ✓ The Management

   ✓ Shareholders and Investors

   ✓ Employees

   ✓ Customers

   ✓ Suppliers

   ✓ Business Partners

2. *Identify Relevant ESG Issues*

   The Group referred to the ESG Guide and took into account the ESG trends of the steel industry to identify ESG issues relevant to the Group. We identified a total of 10 environmental ESG issues and 19 social ESG issues.

3. *Conduct Questionnaire Survey*

   The Group invited key stakeholders to rank the importance of 10 environmental ESG issues and 19 social 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*

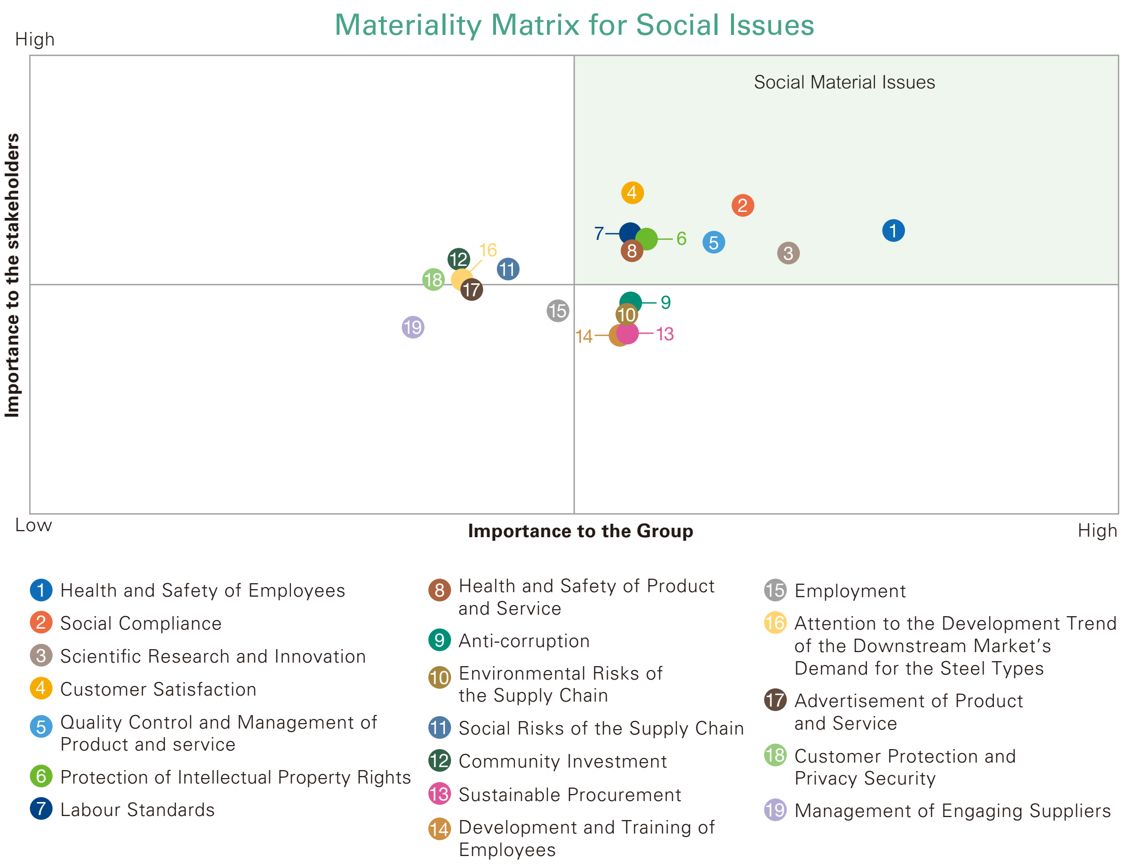
The Group analysed the results of the questionnaire survey to build the materiality matrices, and identified the issues with high scores in both "Importance to Stakeholders" and "Importance to the Group" as "Material Issues".

5. *Verify Material Issues*

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

During the reporting period, the Board reviewed and assessed the materiality assessment result for 2020 based on the actual business situation of the Group, and confirmed that it was still applicable to the reporting period. The corresponding materiality matrices and list are as follows:

Materiality Matrix for Environmental Issues



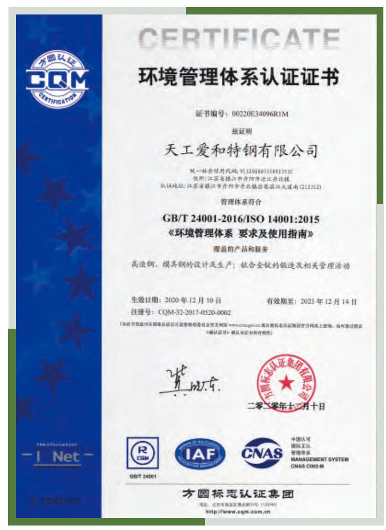
Material Issues (Materiality from the highest to the lowest)	
Environmental Aspect	**Social Aspect**
1. Ecological Conservation	1. Health and Safety of Employees
2. Environmental Compliance	2. Social Compliance
3. Wastewater Discharge and Management	3. Scientific Research and Innovation
4. Exhaust Gas 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

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

4 Environmental Management

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 operations on the environment. In strict compliance with the *Law of the People's Republic of China (PRC) on Promoting Clean Production, Environmental Protection Law of the PRC*, the *Atmospheric Pollution Prevention and Control Law of the PRC* and other relevant laws and regulations in the places where it operates, the Group has formulated and implemented the *Environmental Protection Management System and the Wastewater, the Exhaust Gas and Noise Prevention and Control Regulation*. In order 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 various departments and personnel in each stage 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 abide by environmental protection requirements. In addition, the Group implements the *Environmental Protection Training and Education Management System*, based on which actively carries out occupational environmental protection education and training for employees, so as to enhance the environmental protection awareness of all employees.

The general manager of each subsidiary of the Group is the first responsible person for environmental protection and is fully responsible for the environmental protection work of each subsidiary of the Group. At the same time, the Group has established the Safety and Environmental Protection Department (the "SEP Department"), which is responsible for the daily supervision and management of the Group's environmental protection work, including the formulation and improvement of management systems and work plans related to environmental protection, and the specific implementation of relevant work. In addition, the leaders of the SEP Department set up a special leading group for environmental protection and governance to promote environmental protection work with strict standards and conduct comprehensive and thorough investigation of pollution sources to ensure compliance with national and regional emission requirements. The special leading group holds monthly meetings to summarize the key environmental protection work of the current and the next month, so as to ensure the Group's environmental compliance and improve the level of environmental governance.



A number of subsidiaries of the Group have obtained GB/T24001-2016/ISO14001:2015 environmental management system certifications, including but not limited to Jiangsu Tiangong Precision Tool Company Limited, Jiangsu Tiangong Tool New Material Company Limited, Tiangong Aihe Special Steel Company Limited, etc.

During the reporting period, all departments of the Group's headquarter and subsidiaries at all levels signed the *2021 Environmental Production Responsibility Statement*, and set the following annual management targets:

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

During the reporting period, the above annual management targets have been successfully achieved.

4.1 Environmental Objectives

In order to further improve the performance of environmental management, during the reporting period, the Group established medium- and long-term environmental management objectives and corresponding specific action plans, details of which are as follows:

Medium- and Long-term Environmental Objective	Action Plan
Reduce direct and indirect greenhouse gas (GHG) emissions	➢ Implement the *Carbon Emissions Management System* to clarify the focus of 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.

Medium- and Long-term Environmental Objective	Action Plan
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, reduce direct and indirect air pollutant emissions, and further increase the proportion of solar energy use to reduce purchased electricity.
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.
Improve energy efficiency	➢ Further reduce energy consumption through multiple channels and reduce energy waste from the source, such as strengthening power-saving education, adopting customised 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.
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.

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 meet the national standards, the Group has formulated and implemented internal management systems such as the *Environmental Protection Management System and the Environmental Monitoring Management System*. At the same time, each subsidiary is required to formulate and implement corresponding systems based on the Group's requirements and their respective actual conditions to standardise the emission management. In addition, the Group has also set up a real-time monitoring system to monitor the discharge data of sewage and exhaust gas to further ensure the compliance with discharge standards.

Wastewater

The Group's wastewater 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 regulate the discharge of sewage, the Group has set up a sewage treatment station to centralise the treatment of all sewage and ensure that the sewage meets the discharge standards before discharge. In addition, the Group has also formulated the *Management Measures for Prevention and Control of Water Pollution* to clarify the division of responsibilities for wastewater discharge and management. In particular, the water treatment facilities in the workshop and the sewage treatment stations of the Company are responsible for the daily maintenance of the water treatment equipment. In the event of failure of the water treatment equipment, the user department will immediately take emergency measures, report to the SEP Department for repair and record in a timely manner. The SEP Department is responsible for inspecting pollutant emissions and entrusting third-party monitoring agencies or assisting 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 on a timely basic, take corrective measures, 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. In order to prevent the impact of sewage leakage on the environment, we regularly inspect sewage discharge pipelines and treatment facilities to prevent sewage leakage.

The Group has water circulation systems in place, such as recycling of treated sewage for cooling the production facilities.

Exhaust Gases

The Group's exhaust gas emissions mainly come from the combustion of natural gas. In order to standardise 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 the environmental protection equipment of their respective departments, and strictly controlling the exhaust gas 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 dust and oily fume, every production workshop is equipped with high-efficiency dust disposal devices and oily fume collection devices, and the Equipment Maintenance Department conducts regular inspection and maintenance of the equipment to avoid additional exhaust emissions due to 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 has established the *Waste Management Code* to clearly define and classify the waste generated by the Group, and also regulate the storage, management and disposal rules of various types of waste. The Group strictly implements this procedure to strengthen waste management 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 *Hazardous Waste Management System* to regulate the work processes of identification, declaration, classification, storage, transportation, disposal and monitoring of hazardous waste. At the same time, the Group has clarified the division of responsibilities of departments at all levels and provided guidance for the emergency plans and personnel training regarding the hazardous waste. The Group's SEP Department is responsible for the daily management of hazardous waste, monitoring the waste management of each production unit, improving the environmental monitoring system, and monitoring and spot-checking the disposal of various types of waste. According to the internal process, the Group posts identification labels and warning signs for hazardous wastes, and then classifies and delivers them to the special storage points of hazardous wastes for subsequent disposal by qualified third parties, while recording the disposal amount of various 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 256 tonnes of waste lubricating oil.

The Group's non-hazardous waste mainly includes slag, domestic waste, food waste and construction waste generated during the production process. Recyclable non-hazardous waste will be stored in the warehouse after classification and recorded by designated personnel, and then delivered by the Group to qualified recycling agencies for recycling. During the reporting period, the Group actively recycled wastepaper, with the volume of recycled wastepaper reaching 213 tonnes. 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 by ourselves 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 saving resources.

Efficiency of Water and Electricity Consumption

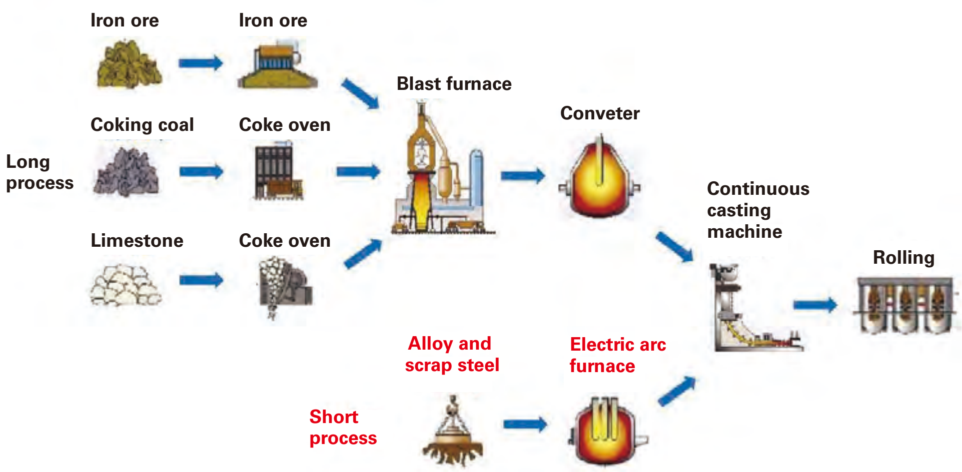
In order to improve the efficiency of the Group's water and electricity consumption and reduce the waste of resources, the Group has formulated and implemented internal regulations such as the *Water-saving and Electricity-saving Management System* and the *Electricity-saving Management Regulations*. The power workshop 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 also requires all power-consuming departments and workshops to formulate and implement specific power-saving plans for various products and production processes, and continuously improve the awareness of planned electricity consumption. The Group also carries out internal energy inspection and assessment. During the reporting period, the Group's water was mainly from municipal water supply and there was no difficulty in obtaining water sources.

Water Conservation	Electricity Saving
➢ Check water pipes and facilities regularly and deal with water leakage in water pipes and taps in a timely manner ➢ Gradually adopt water-saving equipment, such as installing sensor flushing toilets and sensor faucets ➢ Strengthen water conservation education and enhance employees' awareness of water conservation ➢ Implement water consumption assessment for departments with higher demand for water, and install water meters when necessary	➢ Reasonably arrange production time based on local electricity consumption situation and conduct smelting during the off-peak period at night ➢ Turn off production equipment in time to avoid equipment idling ➢ Install lamps with appropriate power according to the lighting requirements of different areas ➢ Gradually use energy-saving lamps ➢ Staff on night shift strengthened the inspection of lighting and turned off unnecessary lighting ➢ Strengthen energy-saving education and enhance employees' awareness of electricity conservation ➢ 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 6,557,160 kWh. Also, in order to improve the water use efficiency, the Group has set an assessment indicator for the average consumption per RMB10,000 of output value in 2021.

Efficiency of Raw Material Consumption

The Group's main production raw materials for tools steel products include alloy, scrap iron and steel grinding swarf. In order to save resources and improve the use efficiency of raw materials, we recycle and reuse the steel grinding swarf in the production process. During the reporting period, the Group recycled and reused 66,278.37 tonnes of steel grinding swarf. In addition, the Group actively adopts the industry's advanced electric arc furnace short-process steelmaking process, gives full play to its environmental and economic advantages of low energy consumption and low emissions, so as to effectively improve the utilisation efficiency of raw materials and maximise the efficiency of resource utilisation.



Data source: GF Securities – Special Research | Steel (6 March 2018)

4.4 Response to Climate Change

As the global climate changes and its impacts continue to intensify, the Group actively formulates relevant policies and responds to climate change with practical actions. During the reporting period, the Group carried out ESG risk assessment, and the assessment results showed that the Group's "climate change and extreme weather risks" and "GHG emission and management risks" are at the "low" risk level for now. Nevertheless, in order to prevent the potential adverse impact of climate change as soon as possible, the Group has actively formulated and implemented the *Carbon Emissions Management System*, which provides guidance for the Group's energy conservation and emission reduction work and clarifies that the key areas of the Group's GHG emission reduction projects are to improve the energy efficiency, develop and apply new energy and renewable energy. At the same time, the system also clearly stipulates that the Energy Management Leading Group is the Group's management and implementation organisation for GHG emission reduction and its specific responsibilities include formulating and improving the management methods and working procedures for GHG emission reduction projects, taking charge of the development and implementation of relevant projects, and calculating the emission reduction of relevant projects. Other project entities, project assistance units and project-related units shall cooperate with the Energy Management Leading Group to perform their corresponding responsibilities. The system also regulates the implementation of GHG emission reduction projects and the carbon emission inspection and assessment process, providing guidance for the implementation of GHG emission reduction projects. At the same time, the carbon emission inspection and assessment are included in the performance assessment system, and the Energy Management Leading Group is responsible for the assessment of units related to GHG emission reduction projects, so as to effectively promote carbon and pollutant emission reduction.

During the reporting period, in order to manage the Group's GHG emissions in a more detailed manner, the Group disclosed GHG emissions and intensity by product category. For details of the data, please refer to Chapter 10 – Environmental Key Performance Indicators. In addition, the Group has also set medium- and long-term objective for tackling climate change. For details, please refer to section 4.1 – Environmental Objectives.

With the increase in meteorological abnormalities caused by climate change, the Group has taken various measures to actively respond to the occurrence of severe pollution weather events to reduce its impact on the Group's business operations and the public. In response to environmental emergencies such as heavy pollution weather, the Group urges all subsidiaries to formulate relevant emergency response plans based on their own conditions, and at the same time clarifies the responsibilities of each organisation to ensure the standardisation and scientificity of emergency treatment when environmental emergencies such as heavy pollution weather occur. At the same time, every 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 the serious pollution weather event.

5 Tiangong Quality

Quality is the cornerstone of the corporate development. The Group adheres to the spirit of craftsmanship, meticulously manufactures special tools steel, and is committed to providing customers with high-quality products and services by continuously improving the quality management level, leading the industry towards high-quality and sustainable development. During the reporting period, the Group strictly complied with relevant laws and regulations in relation to product health and safety, advertising, labelling and privacy matters in the places where it operates, including but not limited to the following:

- Production Safety Law of the People's Republic of China
- Product Quality 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

With the excellent product quality and the good corporate image, during the reporting period, the Group was awarded a number of awards and honors, such as "2021 China Excellent Steel Enterprise Brand", "2021 China Special Steel Enterprise Excellent Brand" and "2021 Zhenjiang Gold Mountain Award for Manufacturing Industry". The Group was also invited to participate in the production of the centenary documentary of the Communist Party of China, "Iron and Steel Backbone", by the Publicity Department of the CPC Central Committee, fully demonstrating the extensive recognition of the Group's brand and quality by the state, provincial and municipal units.

The Group was invited to participate in the production of the century documentary of the Communist Party of China by the Publicity Department of the CPC Central Committee

5.1 Quality Control

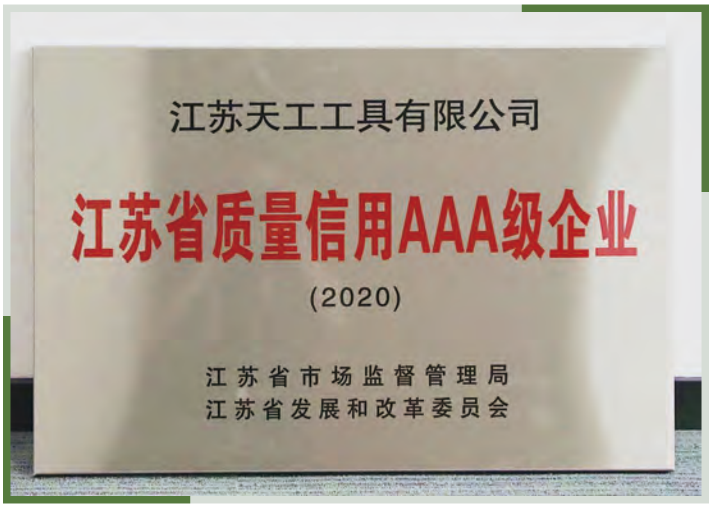
To ensure the product quality, the Group implements a quality management system covering the entire product life cycle. In accordance with GB/T19001-2016/ISO9001:2015 *Quality Management System – Requirements*, we have formulated a strict product quality control system and process. In addition, we also carry out product measurement management in accordance with GB/T19022-2003/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/T19001-2016/ISO9001:2015 quality management system certifications, including but not limited to Tiangong Aihe Special Steel Company Limited, Jiangsu Tiangong Precision Tools Company Limited, Jiangsu Tiangong Tools New Material Company Limited, etc.

The Group has formulated and implemented a series of operating procedures and product quality control manuals for various products, such as the *Management Procedure for New Product Development*, the *Control Procedure for Self-Made Unqualified Product* and the *Enterprise Measurement Management Regulation*, in order to conduct strict quality control at every stage from raw material inspection to the product completion. Through the sample inspections of raw materials, quality inspections of semi-finished products at every production stage, special quality testing of finished products and other ways, we ensure that the product quality meets the standards. Before the final delivery, we will label the products that have passed quality tests. Only after the product label contents are confirmed as correct according to internal procedures and the product quality warranties are obtained, can the relevant products be officially launched to the market.

If customers have any questions about the products after the product delivery, they can contact the Sales Department of the Group for handling. The Sales Department of the Group shall negotiate with customers on the specific treatment measures according to the *After-sales Services Management System*. The Group shall adopt appropriate measures in a timely manner to solve the problems of any unqualified products.

With a sound production management system and excellent product quality, during the reporting period, the Group was also awarded the 2020 "Quality Credit AAA Enterprise in Jiangsu Province" jointly issued by Jiangsu Provincial Market Supervision and Administration Bureau and Jiangsu Provincial Commission of Development and Reform, and the "Jiangsu Provincial Governor Quality Award" issued by the Jiangsu Provincial Government.



During the reporting period, the Group was awarded the 2020 "Quality Credit AAA Enterprise in Jiangsu Province" and the "Jiangsu Provincial Governor Quality Award" issued by the Jiangsu Provincial Government

5.2 Customer Rights

The Group insists on safeguarding the rights and interests of customers to obtain the support and trust of customers, thereby establishing long-term partnership with customers. In terms of product services, the Group has set up a product authenticity checking system for customers to check the authenticity of the products through QR codes, digital security query system and product serial number query system to make sure that the purchased products are authentic. In terms of customer privacy, the Group sets access authority for sensitive customer information in accordance with relevant laws and regulations, and only employees of the Sales Department and the Finance Department can access customer personal information. In addition, we require employees to handle customer information cautiously to prevent leakage of customer information. In terms of advertising, the Group complies with laws and regulations related to advertising and promotion to ensure that the contents and forms of advertisements are true, lawful, and healthy, and avoid false or misleading content in advertisements.

Customers' opinions are valuable for the Group to continuously improve the product quality. Therefore, the Group conducts customer satisfaction surveys every year and invites key customers to provide valuable opinions. The 2021 customer satisfaction survey report shows that in overall, customers are very satisfied with the Group's product and service quality.

The Group has formulated the *After-sales Service Management System* to regulate the specific process for handling customer complaints and set up comprehensive and smooth customer communication channels. Customers can provide feedback or complaints about the Group's products and services through various channels such as customer service hotline, email and site visits. Upon receipt of a customer complaint, the Group will record and verify the complaint, investigate the cause of the problem, and formulate appropriate solutions for different types of complaint cases. At the same time, the Group will keep tracking on the follow-ups of the complaint cases until they are properly resolved. In addition, our sales team also conducts regular meetings with customers to understand their opinions and suggestions on the Group's products and services. During the reporting period, the Group received a total of 65 customer complaints, all of which have been properly handled. In particular, the customer complaints regarding product quality have decreased by 35%.

5.3 Leading Innovation

Technological Innovation

Technological innovation is an important driving force for the improvement of corporate competitiveness. Therefore, the Group actively develops new technologies and products that meet market demand. Since we established the first production line in China of the powder metallurgy for tool and die steels in 2019, the Group has continued to undertake research on the powder metallurgy and overcome the technical problems in this field, breaking the international monopoly on the key technology of the powder metallurgy. The Group has become the only corporate in China that masters the large-scale production technology of tool and die steels powder metallurgy, promoting the Group's development in the future vigorously and making the Group a leader in the R&D and mass production of new materials for the high-end manufacturing industry in China. During the reporting period, the Group's powder metallurgy business gradually expanded its production, which will help the Group improve its competitiveness in the international high-end product market and gradually realise the transformation from the reduced material manufacturing to the increased material manufacturing (such as 3D printing), therefore further improving the productivity.

In addition, in terms of manufacturing techniques, the Group has been well known for its technologies. In order to increase the turnover efficiency of the production process, the Group explored the new production techniques. By optimising the temperature and speed of pouring and controlling the volume contraction of the liquid steel at the pouring ingot riser after curing, the Group managed to improve the inner quality and increase the production yield of steel ingots, as well as reducing the cost of subsequent processes such as labour cost and other relevant manufacturing costs. The new techniques have broken the restriction of specific conditions of the traditional technology, effectively solved the problem of energy waste and reduced the capital occupation period.

During the reporting period, the Group's first overseas high-automated cutting tool factory in Thailand was officially put into operation, which is expected to further meet the demand for high-end precision tools in the international market and lead the industry towards the innovation of high-end tool technologies.

At the same time, the Group also attaches great importance to the cultivation of innovative talents. During the reporting period, through various means, the Group encouraged employees to innovate and therefore promoted the R&D of new products and innovative production techniques. Besides, the Group also actively attracted and cultivated reserve innovative talents through the cooperation with external organisations. In June, the Group officially launched the "Tiangong International Orientation Class" jointly organised by the Group and colleges in Jiangsu, actively promoting the deep integration of production, teaching and learning, marking a breakthrough in the Group's innovative practice of "school-enterprise cooperation and talent co-cultivation". In November 2021, the Group held the 2021 Technological Innovation Honouring Ceremony, to select annual technical elites and commend groups and individuals who have made outstanding achievements in scientific and technological innovation. In the same month, the Group held the "Summit Forum on High-quality Development of the Industry", which provided high-quality analysis and intelligent solutions on the current development status of the new material and cutting tool industry as well as the opportunities and challenges faced. In the forum, the Group also formally engaged a national expert of tungsten material engineering technology as the chief scientist of the Group and signed an industry-university-research strategic cooperation agreement with two domestic universities, further promoting the corporate innovation and development.

The opening ceremony of Tiangong International Orientation Class

2021 Technological Innovation Honouring Ceremony

Summit Forum on High-quality Development of the Industry

Intellectual Property Protection

In order to further cultivate the corporate innovation culture and ensure the internal R&D achievements, the Group has formulated the *Intellectual Property Management System* to regulate the management of intellectual property rights. The system clearly regulates and defines the categories of the Group's intellectual property rights, the duty distribution of intellectual property management work, 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 commercial secrets, the Group signs confidentiality agreements with employees and business partners to clarify the terms related to the Group's intellectual property rights protection.

6 Safety First

The Group always puts the health and safety of employees as the top priority and implements the work safety policy of "Safety First and Prevention-oriented". In order to achieve the goal of zero casualties, the Group has established a sound safety production management system and formulated the *Occupational Health and Safety Management System*, which sets out safety management standards for the electricity, liquefied gas and electric welding use, work at height, safe operation of machinery, disposal of inflammable, explosive and hazardous chemicals, etc., to provide rules and guidelines for employees' safe work, and at the same time strengthen employees' safety awareness to prevent casualties.

Several subsidiaries of the Group have obtained GB/T45001-2020/ISO45001:2018 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 Material 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, the Head of the Group's SEP Department is responsible for the specific management of the Group's production safety, supervising the implementation of production safety regulations and operation safety procedures by various departments, and providing technical guidance to safety officers of various departments. Every factory of the Group has a safety officer who is responsible for organising safety production education and training activities for employees, and guiding employees to correctly use personal protective equipment, mechanical equipment and tools to ensure that employees fully understand the safety production system and operating regulations. In addition, the safety officer is also responsible for inspecting and maintaining the safety equipment of the factory, and reporting to the superior management department in a timely manner if any unsafe factors are found in production process.

6.2 Safety Production Training

The Group has formulated and implemented the *Safety Training System*, which requires all employees to receive comprehensive safety training to ensure that they are familiar with all safety management systems and sign the *Letter of Undertaking of Safety Production for Employee* before they officially perform 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	Laws and regulations of safety production, the Group's safety production rules and regulations, basic safety knowledge
Level 2 training	Characteristics of factory production, conditions of machinery and equipment, measures of accident prevention, 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 and accident case studies

During the reporting period, the Group organised a number of safety production-related training activities, including but not limited to the following:

- In May 2021, the Group carried out special training on safety production knowledge for all employees, covering various safety hazards such as injury by cranes, high temperature burns, falling from height, and potential electric shock on site. The Group provided safety production training containing safety production laws and regulations, case analysis, as well as image and video materials for various types of personnel, so as to improve the safety production awareness and skills of all employees.

- In June 2021, the Group carried out safety training and education for all employees with the principle of "safety and environmental protection is the premise and guarantee of all work". The Group not only organised safety knowledge training for positions related to injury by cranes, high temperature burns, falling from height and potential electric shock on site, but also provided a three-day special education and training for employees of the positions related to metal smelting, limited space work and dust storm prevention. This round of training covered 2,471 front-line employees, with an average training time of more than 3 hours per employee.

- In October 2021, the Group held a production safety and environmental protection work summary conference and a specialised training on production safety themed "Strengthening Awareness and Enhancing Responsibility". The Emergency Management Bureau of Danyang was invited to provide training on production safety laws for all participants and interpret on the new articles of relevant laws, which deepened the employees' understanding of the new production safety laws and strengthened the legal awareness and the sense of production safety responsibility of our management at all levels.

6.3 Inspection and Review of Safety Production

The Group's safety production inspection is mainly divided into the system inspection and the potential risk inspection, which is regulated by the *Safety Inspection System*. The system inspection includes monitoring of the soundness and implementation of the safety production system, while the potential risk inspection includes checking of whether there are potential safety risks in machinery equipment, all kinds of buildings and dangerous goods. The Group conducts a series of safety production inspection activities at all levels every year, including the quarterly firm-wide safety production inspection, monthly workshop safety inspection meetings, daily safety production briefing and summary of each team. In particular, in the monthly workshop safety inspection meetings, the safety performance of each workshop will be reviewed and reported to the superior department. Every team will conduct a five-minute safety production briefing before commencing work and a three-minute safety inspection summary before leaving work every day, to ensure that employees are always maintaining the safety production awareness.

In addition, the Group holds department meetings quarterly to review and assess the work of production safety, labour protection and safety education during the quarter, so as to continuously improve the management on production safety. 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 performance on the safety management and accident control. The written report shall include the following contents:

- 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 Group has formulated the *Emergency Response Plan* for getting well-prepared for carrying out emergency relief work in case of fire and other unexpected incidents. The plan provides clear guidelines on response to major safety emergencies identified by the Group, such as fire, electric shock, explosion, food poisoning, heat stroke, vehicle accidents, falling from height, mechanical injury accidents, etc. The Group's Safety Production Leading Group is responsible for commanding and implementing emergency relief work in a timely manner to minimise casualties and property losses caused by relevant accidents. In addition, the Group has also set up a special fire-fighting team, a first-aid team, an emergency evacuation team, an external liaison team and a transportation support team to ensure that emergency safety accidents could be handled with the highest efficiency and therefore reduce the impact of accidents. At the same time, we organise an annual emergency knowledge and skills training for all members of the Safety Production Leading Group and the Emergency Response Team every year, covering emergency response procedures, first aid methods, use instructions of fire extinguishers, etc., to improve their ability to respond to emergencies.

The Group reviews the *Emergency Response Plan* every year and revises it when necessary to ensure its applicability and effectiveness. In particular, the Group also organises emergency drills every year to improve the Emergency Response Team's practical experience and response capabilities, and revises the *Emergency Response Plan* according to the problems found during the drills.

The heatstroke emergency drill of the Group's high speed steel division

The fire emergency drill of the Group's die steel division

6.5 Prevention and Control of the Pandemic

In order to effectively prevent and control the COVID-19 pandemic, the Group has formulated the *Emergency Plan for the Prevention and Control of the Pandemic* to regulate the prevention and control responsibilities of personnel at all levels as well as various emergency responding measures for the pandemic prevention and control. The Group has established an Emergency Leading Group for the Prevention and Control of Pandemic, which is responsible for commanding the prevention and control of the pandemic. At the same time, all personnel are required to take body temperature check before entering factories or offices. Only those with normal body temperature can enter workplaces, while those with abnormal body temperature shall return home for rest and keep observing the health status, and seek medical treatment and conduct virus nucleic acid test when necessary. During the severe period of the pandemic, all employees were required to wear masks at all times at the workplace. In addition, we are equipped with sufficient anti-pandemic supplies, including infrared temperature detectors, alcohol disinfectants, hand sanitisers, masks and disposable gloves, etc., to support the smooth implementation of the epidemic prevention and control work.

During the Spring Festival of 2021, in order to comply with the overall requirements of the local government for the epidemic prevention and control, the Group actively promoted and encouraged all employees not to return home unless necessary, and advocated employees to conduct contactless communication through telephone, internet and other means. In order to motivate employees, the Group provided additional New Year red packets and other benefits to employees who stayed locally, which encouraged employees to fight the epidemic while sending holiday greetings to them.

Thanks to the strict and efficient epidemic prevention measures and personnel movement management, the Group did not experience any outbreak of the epidemic during the reporting period.

7 People-oriented Culture

The Group believes that the success of corporate development depends on the efforts and contributions of its employees. Therefore, 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 resource management system to specify the procedures for recruitment, promotion and dismissal, etc. The Group has formulated and implemented the *Human Resource Management System* to define and regulate the management rules of various employment issues, including recruitment management, on-boarding process of new recruits, promotion management, employee dismissal management, employee welfare and employee training management, etc.

Diversity and Equality

The Group adheres to the principle of "Openness, Fairness, Competition, Competitive Selection and Voluntariness", provides equal employment opportunities for all candidates from different backgrounds, and is committed to creating a diversified and inclusive working environment. The Group insists on the talent-based selection, takes morality, knowledge, ability, work experience and other factors as the basis of recruitment consideration, and opposes any form of discrimination to ensure that applicants will not be treated unfairly due to factors such as age, gender, race, ethnicity, religious belief or physical defects.

The specific recruitment process of the Group is as follows:

Recruitment Information	Resume Screening	Interview	Formal Admission
Human Resource Department (HR Department) selects the appropriate recruitment channels, publishes recruitment information, and specifies job position requirement.	HR Department would screen the resume based on the Job Position Description after receiving candidates' application forms.	Candidates would have to attend interviews with the management of the relevant department after interviewing with the HR Department.	The candidate who obtained the acceptance letter is formally admitted after passing the background check and body check.

Legal Labour

The Group strictly complies with the *Labour Law of the People's Republic of China*, the *Labour Contract Law of the People's Republic of China* and other applicable laws and regulations related to employment and labour in the places where the Group operates, ensures legal employment and strictly avoids child labour and forced labour. During the recruitment process, the HR Department of the Group carefully verifies the identity documents of the applicants to ensure that they are at least 16 years old to avoid the employment of child labour. In addition, the Group prohibits any form of forced labour. During the recruitment process, employees can choose to sign labour contracts at their own wishes and have the freedom to resign. The Group does not encourage overtime work and does not force employees to work involuntarily. Our labour 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. For the unavoidable overtime work, employees are required to apply to their superiors in advance.

If the employment of child labor or forced labor is found, we will conduct further investigation and terminate the employment immediately, if appropriate. We will also investigate the relevant departments and personnel to identify loopholes for related problems. We will review and improve the human resources management system to avoid similar situations from happening again. We also encourage employees to report relevant cases through our reporting channels if there is unfair treatment on their working hours.

Dismissal

In order to protect the rights and interests of both the Group and employees and avoid labour disputes caused by the termination of labour contracts, we have formulated the *Regulations on the Management of Employment Termination* to standardise the employee resignation procedures, 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 labour 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 benefit system. The Group has formulated and implemented internal remuneration management regulations such as the *Compensation Management Regulations for Executive Management Positions* and the *Compensation Management Regulations for Technical and Management Positions*, to clarify the remuneration structure and salary adjustment standards of each position. Every year, the Group conducts a comprehensive annual assessment of employees, which includes three parts – self-rating, rating by departmental colleagues and rating by supervisors, based on which makes appropriate adjustments of employees' remuneration.

The Group has also established a sound employee welfare system. In strict accordance with requirements of the places of operation, we pay various social insurances for our employees, including basic pension insurance, basic medical insurance, maternity insurance, work injury insurance, unemployment insurance, housing provident fund, etc. In addition, the Group implements the *Regulations on Leaves Management* to ensure that employees can enjoy paid leave and other statutory holidays stipulated by law, such as marriage leave, maternity leave and funeral leave. In addition to statutory benefits, we also provide employees with different types of benefits, including free working meals, free physical examination, additional insurance, holiday benefits, special prize money for employees' children who enter famous universities, the reimbursement of Spring Festival Rush fares, tourism benefits, etc.

During the reporting period, the Group carried out annual physical examination for all employees

During the reporting period, the Group granted prize money to employees' children who were admitted to famous universities

7.3 Hearts with Tiangong

The Group actively carries out a variety of recreational activities to enrich employees' spare time and enhance their sense of happiness and belonging.

To celebrate the Women's Day, the Group arranged half a day off for all female employees on 8 March with the subsidies calculated according to relevant regulations. At the same time, the Group carried out festival activities such as lucky draws and gift distribution, showing the honest greetings and blessings to female employees.

In addition, the Group has established and renovated the employee recreation hall, which is equipped with self-service coffee machines, bookshelves, table tennis tables, billiards tables, massage chairs and other recreational and leisure facilities for employees to use freely, so as to help employees relax and enhance their bonding with colleagues.

Lounge

Bookshelves

Equipment of table tennis and billiards

7.4 Promotion and Development

The Group continuously improves the promotion system and training system, further invests in the enhancement of employees' professional knowledge and skills, in order to ensure fair promotion opportunities and create an equal and positive working environment.

Promotion System

The Group has established a transparent promotion system, and formulated and implemented the Promotion Management Regulations to regulate the employee promotion management procedures. Through the *Promotion Management Regulations*, the Group ensures that employees can clearly understand the conditions required for promotion, so that they can conduct self-improvement accordingly to get promotion opportunities. In this way, the Group could cultivate a fair and positive atmosphere.

Unlocking Potential

The Group is committed to improving the basic and professional knowledge and skills of employees by providing different types of occupational training, so as to expand the employees' career path and help them with self-value achievement.

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 systems and be qualified for their new positions as soon as possible, the Group has formulated the *Measures for the Administration of Induction Training for New Employees* to regulate the management of the on-board training for new employees. The induction training for new employees is mainly divided into two stages. The first stage of training is organised by the HR Department and covers the history and status of the corporate, corporate culture, rules and regulations, teamwork, organisational and departmental responsibilities, etc. The second stage of training is organised by senior employees from various departments, covering a number of special trainings provided to new employees based on their position categories, such as the training about tool technics and application, quality management, safety operation procedures, etc. After the training, training assessment for employees will also be conducted to ensure that they fully understand and master the training content.

In addition, the Group adopts a "one-to-one" apprenticeship programme to cultivate talents in technical positions. Under this programme, experienced employees (i.e., masters) will teach new employees (i.e., apprentices) various work experience and methods by way of passing on knowledge, helping and guiding apprentices. To this end, we have formulated and implemented the *Interim Measures for "Master-Apprentice" Program*, which regulates the specific rules and defines the qualifications for becoming masters, the way master-apprentice relations are established, and the duties of masters and apprentices. The Group has also set up an incentive mechanism to reward masters and new employees with outstanding performance, so as to motivate employees to actively participate in apprenticeship activities.

During the reporting period, various departments of the Group organised different types of training, including but not limited to the following:

- The Group and the First People's Hospital of Zhenjiang carried out party building pair-up activity and launched the "Enterprise Emergency Response" activity, inviting emergency medicine specialist to provide first-aid training lectures for the Group's employees, teaching the skills of external injury and haemostasis treatment, heat stroke treatment and cardiopulmonary resuscitation, and conducting a Q&A interaction with employees.

- During the reporting period, the Group organised education and training activities on learning Party's history to truly understand the truth of history, increase self-confidence, uphold the morality and take practical actions, which could help the Group build a leading team that is loyal, united and innovative.

8 Responsible Operation

8.1 Supplier Management

The Group attaches great importance to the environmental and social risk management of the supply chain, and has formulated internal policies such as *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 regulate the procurement process, strengthen the supervision and management of procurement, and ensure the institutionalisation and standardisation of procurement. We strictly implement internal policies related to supply chain management to ensure the fairness, justice and transparency of bidding and procurement processes.

The Group mainly purchases metals and other raw materials as well as various 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 departments such as the user departments, the Technology Innovation Department and the Equipment Department to review the relevant suppliers and express opinions. After reaching a consensus on the selection of suppliers, the relevant departments shall sign and confirm on the Group's *Tender Summary Form* and submit it to the General Manager for review.

In order to further reduce the social and environmental risks of the supply chain, the Group has established a qualified supplier system. The Group's Supply Department regularly maintains the list of qualified suppliers according to the types of materials to ensure that there are at least three qualified suppliers for each type of materials and that the suppliers for procurement business must be selected from such list. The Supply Department also actively searches for potential high-quality suppliers, and at the same time, according to the characteristics of materials and market conditions, conducts review and inspection on qualified suppliers to ensure that the list of qualified suppliers is updated at least once or twice a year to continuously monitor the quality of supply.

The Group conducts annual review of suppliers' products, services, environmental and social performance, and the contents of review include the product quality, supply speed, after-sales services, management level, whether relevant environmental and social management measures have been formulated, whether there are records of severe 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 inspections when needed, in order to practically evaluate suppliers' performance on environmental and social responsibility. If suppliers are found to be involved in any violation such as child labour and forced labour, 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 with us. In addition, in order to promote the green and low-carbon procurement, the Group gives priority to engaging local suppliers, in order to reduce pollutant emissions from the transportation in the supply chain.

8.2 Anti-corruption and Integrity

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 abides by the *Criminal Law of the People's Republic of China,* the *Supervision Law of the People's Republic of China,* the *Interim Provisions on Prohibition of 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 behaviour norms, supervision mechanisms, and violations handling procedures. To ensure that employees are well aware of their responsibilities, we sign the *Employee Integrity Agreement* with employees to protect the interests of both the Group and employees. Moreover, 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 also organises a number of internal anti-corruption themed training to effectively enhance employees' awareness of anti-corruption. During the reporting period, the Group carried out a total of 16 anti-corruption related training and courses, covering the directors and employees of various departments, and 96.5% of the employees participated in the training.

The Group invited the prosecutor of Danyang People's Procuratorate to provide anti-corruption training

The Group invited external training institutions to conduct the training on professional quality and integrity

The Group actively organised a number of internal anti-corruption training activities

In response to potential corruption, the Group has also set up a special reporting hotline and email to receive anonymous reports from internal and external parties. The Group's Administrative Department, Legal Department and Internal Audit Department shall conduct investigations based on the whistle-blowing information to ensure the authenticity and collect relevant evidence, and propose suggestions for handling according to the investigation results. If the corruption report is verified to be true, the whistle blowers will be rewarded with a bonus as an incentive. The Group does not tolerate any form of corruption, and if employees are found to be involved in corruption or other criminal offences, 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 corruption brought against the Group or its employees.

9 Passion for Philanthropy

The Group actively gives back to the society, focuses on the charity 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" in 2007, and has been providing financial assistance to students with financial difficulties at Nanjing Normal University for more than a decade. We hope to reduce the financial pressure of the students so that they can be dedicated to studying as well as enjoying the university life, and we also hope that the scholarship can stimulate students to boost their talents and contribute to the society in the future.

During the reporting period, the Group actively participated in charity donations, and the targeted recipients include the Nanjing Normal University Development Fund, Haihui Temple in Danyang, Jiangsu, Zhenjiang Charity Federation and medical personnel involved in the anti-pandemic work, with total donations of RMB2.61 million.

10 Environmental Key Performance Indicators[1]

Indicators	Unit	2021	2020
Output			
Steel and titanium alloy	tonnes	**207,006**	211,836
Air pollutants[2]			
Sulphur oxides emissions	tonnes	**0.69**	0.83
Nitrogen oxides emissions	tonnes	**66.80**	66.33
Wastewater			
Wastewater discharge	tonnes	**212,248.00**	187,951.00
GHG[3]			
Scope 1: Direct emissions	tonnes of CO_2e	**91,041.10**	88,269.05
Scope 2: Indirect emissions	tonnes of CO_2e	**398,312.64**	409,713.14
Total GHG emissions	tonnes of CO_2e	**489,353.74**	497,982.19
Total GHG emissions intensity	tonnes of CO_2e/ tonne of output	**2.36**	2.35

1 Compared with 2020, the scope of environmental data in 2021 included the addition of the original production plants of the Group in Danyang City and Jurong City. The data involved are either sourced from the data recorded by the Group or conservatively estimated based on past performance or with reference to similar facilities.

2 The calculation reference of air pollutant emissions in 2021 is consistent with that in 2020, which is the *Second National Census on Pollution Sources Pollutant Emission Accounting Coefficients Manual (Trial), Technical Guidelines for Air Pollutant Emission Inventory for Road Vehicles (Trial)* and *Technical Guidelines for Air Pollutant Emission Inventory for Non-road Mobile Sources (Trial).*

3 The calculation scope and reference of GHG emissions in 2021 are consistent with that in 2020. The calculation of GHG 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 GHG emissions of gasoline is based on the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions of Road Transport Enterprises (Trial)*; the calculation of GHG emissions of electricity is based on the 2015 national grid average emission factor in the *Notice on the Preparation of 2018 Carbon Emission Report and Verification and Emission Monitoring Plan.*

Indicators	Unit	2021	2020
Non-hazardous waste			
Melting slag	tonnes	34,600.00	33,029.20
Waste paper	tonnes	213.68	125.24
Total amount of non-hazardous wastes	tonnes	34,611.80	33,154.44
Intensity of non-hazardous wastes	tonnes/tonne of output	0.17	0.16
Hazardous Waste			
Acid and alkaline waste	tonnes	30,761.00	30,803.14
Other hazardous waste[4]	tonnes	2,411.00	714.76
Total hazardous waste	tonnes	33,172.00	31,517.90
Hazardous waste intensity	tonnes/tonne of output	0.16	0.15
Direct Energy			
Direct energy consumption[5]	megawatt hours	457,094.02	440,901.88
Direct energy consumption intensity	megawatt hours/tonne of output	2.21	2.08
Natural gas consumption	ten thousand cubic metres	4,207.47	4,060.39
Natural gas consumption intensity	ten thousand cubic metres/ tonne of output	0.02	0.02
Gasoline consumption	litres	29,176.26	21,470.69
Gasoline consumption intensity	litres/tonne of output	0.14	0.10
Diesel consumption	litres	183,015.00	165,950.24
Diesel consumption intensity	litres/tonne of output	0.88	0.78
Indirect Energy			
Indirect energy consumption (Electricity consumption)	megawatt hours	682,627.84	671,550.80
Indirect energy consumption intensity (Electricity consumption intensity)	megawatt hours/ tonne of output	3.30	3.17
Water resources			
Water Consumption	tonnes	286,639.00	291,275.00
Water consumption intensity	tonnes/tonne of output	1.38	1.38
Packaging materials			
Packaging material consumption	tonnes	5,205.42	4,768.54
Packaging material consumption intensity	tonnes/tonne of output	0.03	0.02

4 The types of other hazardous waste in 2021 remained the same as that in 2020, including hazardous waste such as dust, waste lubricating oil, waste mineral oil and waste batteries collected by dust removal devices during the production process.

5 The unit conversion of energy consumption of natural gas, gasoline and diesel in 2021 is consistent with that in 2020, with reference to the *Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of China Iron and Steel Manufacturers (Trial).*

11 Social Key Performance Indicators

Indicators	Unit	2021	2020
Number of employees (as at the end of the reporting period)			
Total number of employees	no. of employees	**3,108**	3,008
By gender			
Male	no. of employees	**2,300**	2,162
Female	no. of employees	**808**	846
By employment type			
Full-time	no. of employees	**3,108**	3,008
Part-time	no. of employees	**0**	0
By age group			
Under 31 years old	no. of employees	**485**	406
31–50 years old	no. of employees	**1,814**	1,832
Above 50 years old	no. of employees	**809**	770
By regions			
Mainland China	no. of employees	**2,986**	2,997
Regions out of Mainland China	no. of employees	**122**	11
Employee turnover rate[6]			
By gender			
Male	percentage	**9%**	13%
Female	percentage	**8%**	22%
By age group			
Under 31 years old	percentage	**16%**	20%
31–50 years old	percentage	**8%**	13%
Above 50 years old	percentage	**4%**	19%
By region			
Mainland China	percentage	**9%**	15%
Regions out of Mainland China	percentage	**0%**	0%
Percentage of employees trained			
Percentage of employees trained[7]	percentage	**100%**	100%
By gender[8]			
Male	percentage	**73%**	72%
Female	percentage	**27%**	28%

6 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%.

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

8 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	2021	2020
By employee category			
Senior management	percentage	**5%**	3%
Middle management	percentage	**11%**	14%
General employees	percentage	**84%**	83%
Average training hours completed per employee			
Average training hours completed per employee[9]	hours	**8**	25
By gender[10]			
Male	hours	**8**	25
Female	hours	**8**	25
By employee category			
Senior management	hours	**23**	28
Middle management	hours	**9**	10
General employees	hours	**7**	18

Indicators	Unit	2021	2020
Number of suppliers			
By region			
Mainland China	no. of suppliers	**521**	510
Regions out of Mainland China	no. of suppliers	**44**	5
Complaints of products and service			
Number of products and service-related complaints received	cases	**65**	72
Rate of products and service-related complaints resolved	percentage	**100%**	100%

Indicators	Unit	2021	2020	2019
Work-related injury and fatalities				
Number of work-related fatalities	no. of employees	**0**	0	0
Rate of work-related fatalities	percentage	**0%**	0%	0%
Lost days due to work injury	days	**0**	0	0

9 The calculation formula of average training hours of employees is: total training hours of employees/total number of employees.

10 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 comply with (including but not limited to)	Performance during the reporting period
Environmental Aspect		
Aspect A1: Emissions	➢ *Law of the People's Republic of China (PRC) on Promoting Clean Production* ➢ *Environmental Protection Law of the PRC* ➢ *Law of the PRC on Prevention and Control of Air Pollution* ➢ *Law of the PRC on the Prevention and Control of Water Pollution* ➢ *Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste* ➢ *Environmental Protection Tax Law of the PRC* ➢ *Law of the PRC on Appraising of Environmental Impacts* ➢ *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 PRC* ➢ *Labour Contract Law of the PRC* ➢ *Trade Union Law of the PRC* ➢ *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 of the ESG Guide	Laws and regulations that have a significant impact on the Group that the Group comply with (including but not limited to)	Performance during the reporting period
Aspect B2: Health and Safety	➢ *Production Safety Law of the PRC* ➢ *Law of the PRC on the Prevention and Control of Occupational Diseases* ➢ *Special Equipment Safety Law of the PRC* ➢ *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 B4: Labour Standards	➢ *The Labour Law of the PRC* ➢ *The Law of the PRC 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	➢ *Production Safety Law of the PRC* ➢ *Advertising Law of the PRC* ➢ *Trademark Law of the PRC* ➢ *Law of the PRC 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 PRC* ➢ *Company Law of the PRC* ➢ *Supervision Law of the PRC* ➢ *The Bidding Law of the PRC* ➢ *Anti-unfair Competition Law of the PRC* ➢ *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
Disclosure Requirement			
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.		1 About the Environmental, Social and Governance Report 2 Corporate Governance Integrated with ESG
Reporting Principles	A description of, or an explanation on, the application of the Reporting Principles in the preparation of the ESG Report	Materiality: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement.	1 About the Environmental, Social and Governance Report 3 Stakeholder Engagement and Materiality Assessment
		Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.	1 About the Environmental, Social and Governance Report
		Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	
Reporting Boundary	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	Environmental Management
KPIA1.1	The types of emissions and respective emissions data.		10	Environmental Key Performance Indicators
KPIA1.2	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).			
KPIA1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).			
KPIA1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).			
KPIA1.5	Description of emission target(s) set and steps taken to achieve them.		4	Environmental Management
KPIA1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.			
Aspect A2: Use of Resources				
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.		4	Environmental Management
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 i target(s) set and steps taken to achieve them.		4	Environmental Management
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

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks	
Aspect A3: The Environmental and Natural Resources			
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	4	Environmental Management
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	Environmental Management
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.		
B. Social			
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	People-oriented
KPI B1.1	Total workforce by gender, employment type (for example, full- or parttime), age group and geographical region.	11	Social Key Performance Indicators
KPI B1.2	Employee turnover rate by gender, age group and geographical region.		
Aspect 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
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, how they are implemented and monitored.	6	Safety First

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks	
Aspect B3: Development and Training			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid for by the employer.	7	People-oriented
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.		
Aspect B4: Labour 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	People-oriented
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.		
Operation Practices			
Aspect B5: Supply Chain Management			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	8	Responsible Operation
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, how they are implemented and monitored.	8	Responsible Operation
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.		

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks
Aspect 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 Quality of Tiangong
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Due to the Group's product nature, we do not involve recalls of products for safety and health reasons.
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	5 Quality of Tiangong
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, how they are implemented and monitored.	
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 Responsible Operation
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, how they are implemented and monitored.	
KPI B7.3	Description of anti-corruption training provided to directors and staff.	

Regulations, Subject Area, Aspects, General Disclosure & KPI Mandatory		Disclosure Section & Remarks	
Community			
Aspect 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	Passion for Philanthropy
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.		

DIRECTORS & SENIOR MANAGEMENT

Executive Directors

Mr. ZHU Xiaokun, aged 65, 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 49, 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.

* With effect from 30 March 2021, Mr. Wu resigned from his position as the Chief Executive Officer of the Company and was appointed as the General Manager of TG Tools.

Mr. YAN Ronghua, aged 53, 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 57, 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 78, 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 51, 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 50, 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 40, 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. Zhu was appointed as the Chief Executive Officer of the Company with effect from 30 March 2021.

Mr. JIANG Rongjun, aged 58, 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 56, 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 38, 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 42, 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 2021, 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)*	6/6	N/A	1/1	1/1
Mr. Wu Suojun	6/6	N/A	N/A	N/A
Mr. Jiang Guangqing	6/6	N/A	N/A	N/A
Mr. Yan Ronghua	6/6	N/A	N/A	N/A
Mr. Gao Xiang	6/6	2/2	1/1	1/1
Mr. Lee Cheuk Yin Dannis	6/6	2/2	1/1	1/1
Mr. Wang Xuesong	6/6	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 1 June 2021. 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 2021 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 A.6.7 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 80 to 82 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.

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 2021, 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 2021.

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 2021, 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 (Note). 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 2021, the Chairman has held a meeting with the Independent Non-Executive Directors without the Executive Directors being present.

Note: Mr Wu Suojun stepped down from his role as Chief Executive Office of the Company with effect from 30 March 2021 and would remain as an executive Director of the Company. Mr. Zhu Zefeng was appointed as the new Chief Executive Officer of the Company with effect from 30 March 2021. For further details, please refer to the Company's announcement dated 29 March 2021.

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 29 March 2022 to consider and review the 2021 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 2021 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 2021 and one meeting to date in 2022.

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 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 2021 and one meeting to date in 2022.

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 2021, the remuneration of the senior management is listed as below by band:

Band of remuneration	No. of persons
RMB0 to RMB1,000,000	10
RMB1,000,000 to RMB2,000,000	2

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 2021 and one meeting to date in 2022. 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 2021. 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 2021, the total remuneration paid or payable to KPMG was RMB4,030,000, including RMB4,030,000 for consolidated financial statements audit service and RMB nil 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 2021.

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: tiangong@biznetvigator.com
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 Board and senior management recognize the importance of communication with shareholders and accountability to shareholders. 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 at least 20 clear business days' notice (pursuant to Listing Rules requirements) and 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. There was no change in the Company constitutional documents during the year.

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 2021.

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 2021 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 115 and 116.

The financial position of the Group as at 31 December 2021 is set out in the consolidated statement of financial position of the Group on pages 117 to 118. The financial position of the Company as at 31 December 2021 is set out in note 38 to the financial statement on page 209.

The cash flows of the Group for the year ended 31 December 2021 are set out in the consolidated cash flow statement on pages 121 to 122.

Results and Appropriations

The Board proposed a final dividend payment of RMB0.0594 per share for the financial year ended 31 December 2021 (2020: RMB0.0732).

Charitable Donations

Charitable donations made by the Group during the year amounted to RMB2,610,000 (2020: RMB3,205,000).

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 34 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 2021, calculated in accordance with the Companies Law (Cap. 22) (Law 3 of 1961, as consolidated and revised) of the Cayman Islands, amounted to RMB1,796,909,000 (2020: RMB1,328,779,000).

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 34 to the financial statements.

Business Review

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 41 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 2021, 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)	27.72
	Beneficial owner	6,800,000 (L)	0.24
			27.96
Zhu Zefeng	Interests of controlled Corporations[2 and 3]	672,700,521 (L)	24.07
	Beneficial owner	1,500,000 (L)	0.05
			24.12
Wu Suojun	Beneficial owner	2,400,000 (L)	0.09
Yan Ronghua	Beneficial owner	1,500,000 (L)	0.06
Jiang Guangqing	Beneficial owner	900,000 (L)	0.03

Notes:

As at 31 December 2021,

(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.

(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 2021, 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)	27.96
THCL[1]	Beneficial owner	774,758,000 (L)	27.72
Niu Qiu Ping	Spousal interest[5]	674,200,521 (L)	24.12
Sky Greenfield Investment Limited	Beneficial owner[3]	628,768,521 (L)	22.50
	Interests of controlled corporations[4]	43,932,000 (L)	1.57
			24.07

(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 20 July 2020, the Company, as a borrower (the "Borrower") entered into a facility agreement (the "Facility Agreement") with a licensed bank in Hong Kong relating to:

– 15 months term loan facility amounted to USD15,000,000;

– 1-year dividend loan facility amounted to HKD152,601,570; 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 three years from the date of the Facilities Agreements. As at the date of this report, the aforementioned term loan facility and dividend loan facility were fully repaid.

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 52.08% 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 80 to 82.

Final Dividend and Closure of Register of Members

The register of members of the Company will be closed from 30 May 2022 to 2 June 2022 (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 2 June 2022, 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, No. 183 Queen's Road East, Wan Chai, Hong Kong, for registration by no later than 4:30 p.m. on 27 May 2022.

The Board has resolved on 30 March 2022 to recommend the payment of a final dividend of RMB0.0594 per share for the year ended 31 December 2021 (2020: RMB0.0732) to shareholders of the Company whose names appear on the register of members of the Company on 27 June 2022. The register of members will be closed from 28 June 2022 to 30 June 2022, both days inclusive, and the proposed final dividend is expected to be paid on or before 15 July 2022. 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 2 June 2022. 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 2022.

Share Option 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 during the year ended 31 December 2021 and therefore, there were no outstanding share options during the year ended 31 December 2021.

Information on the accounting policy for share options granted and the weighted average value per option is provided in note 3(p)(ii) and note 32 to the financial statements respectively.

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 37 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 2021, 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 2021, 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 2021, 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 2021, except for the following deviation:

Code Provision A.6.7*

Code provision A.6.7 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 1 June 2021 due to the COVID-19 pandemic.

* The amendments of the CG Code came into effect in 1 January 2022, the original code provision A.6.7 is now re-arranged as C.1.6.

Audit Committee

The Audit Committee comprises three INEDs. The Audit Committee held a meeting on 29 March 2022 to consider and review the 2021 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 2021 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 2021 is as follows:

	Percentage of the Group's total	
	Sales	Purchases
The largest customer/supplier	10%	17%
Five largest customers/suppliers in aggregate	26%	27%

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

The related party transactions on leases as disclosed in note 37 to the financial statements also constituted continuing connected transactions under 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 2021, the Group pledged certain bank deposits amounting to approximately RMB244,191,000 (31 December 2020: RMB384,700,000) and certain trade receivables amounting to approximately RMB175,195,000 (31 December 2020: RMB160,835,000).

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 212. 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, 30 March 2022

INDEPENDENT AUDITOR'S REPORT

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 115 to 211, which comprise the consolidated statement of financial position as at 31 December 2021, 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 2021 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 page 142.

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 and the trading of general carbon steel. 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 direct 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, consignment statements 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 page 142.

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 2021 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 131 to 136.

The Key Audit Matter	How the matter was addressed in our audit
As at 31 December 2021, the gross amount of the Group's trade receivables totalled RMB1,305 million, against which a loss allowance of RMB85 million for expected credit losses (ECLs) was made. The carrying value of the Group's trade receivables represented approximately 10% of the total assets as at 31 December 2021. 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 2021 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 137.

The Key Audit Matter	How the matter was addressed in our audit
At 31 December 2021, the Group's gross inventories totalled RMB2,312 million, against which provisions for inventories of RMB34 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 procurement plans agreed with customers in order to assess the residual risk of the inventories' realisability; and • inspecting the inventory ageing report 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 Chan Ting Yuen.

KPMG
Certified Public Accountants

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

30 March 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

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

	Note	2021 RMB'000	2020 RMB'000
Revenue	5	**5,744,873**	5,220,944
Cost of sales		**(4,339,675)**	(4,006,964)
Gross profit		**1,405,198**	1,213,980
Other income	6	**129,387**	70,429
Distribution expenses		**(217,737)**	(87,489)
Administrative expenses		**(134,575)**	(105,963)
Research and development expenses		**(273,821)**	(307,738)
Other expenses	7	**(47,274)**	(35,424)
Profit from operations		**861,178**	747,795
Finance income		**27,563**	24,345
Finance expenses		**(159,047)**	(151,654)
Net finance costs	8(a)	**(131,484)**	(127,309)
Share of profits/(losses) of associates	19	**12,543**	(2,195)
Share of profits of joint ventures	20	**9,418**	3,526
Profit before taxation	8	**751,655**	621,817
Income tax	9	**(80,025)**	(81,495)
Profit for the year		**671,630**	540,322
Attributable to:			
Equity shareholders of the Company		**664,371**	537,024
Non-controlling interests		**7,259**	3,298
Profit for the year		**671,630**	540,322
Earnings per share (RMB)	13		
Basic and diluted		**0.244**	0.209

The notes on pages 123 to 211 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 34(b).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

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

	Note	2021 RMB'000	2020 RMB'000
Profit for the year		**671,630**	540,322
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 RMB1,696,000 (2020: RMB760,000))		**24,430**	(4,840)
Items that may be reclassified subsequently to profit or loss:			
Exchange differences on translation of:			
– financial statements of entities with functional currencies other than Renminbi ("RMB") (inclusive of nil tax (2020: nil))		**(12,086)**	6,795
Other comprehensive income for the year		**12,344**	1,955
Total comprehensive income for the year		**683,974**	542,277
Attributable to:			
Equity shareholders of the Company		**676,701**	538,979
Non-controlling interests		**7,273**	3,298
Total comprehensive income for the year		**683,974**	542,277

The notes on pages 123 to 211 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2021 (Expressed in Renminbi)

	Note	**2021** **RMB'000**	2020 RMB'000
Non-current assets			
Property, plant and equipment	14	**4,273,366**	4,136,546
Lease prepayments	15	**163,214**	147,576
Intangible assets	16	**16,942**	18,842
Goodwill	17	**21,959**	21,959
Interest in associates	19	**61,814**	55,573
Interest in joint ventures	20	**38,699**	28,350
Other financial assets	21	**185,310**	135,810
Deferred tax assets	33(b)	**42,209**	44,170
		4,803,513	4,588,826
Current assets			
Financial assets at fair value through profit or loss	22	**1,651**	877,117
Inventories	23	**2,277,610**	1,688,371
Trade and other receivables	24	**2,131,259**	2,481,866
Pledged deposits	25	**244,191**	384,700
Time deposits	26	**1,749,481**	350,000
Cash and cash equivalents	27	**1,356,881**	827,246
		7,761,073	6,609,300
Current liabilities			
Interest-bearing borrowings	28	**1,600,786**	2,773,982
Trade and other payables	29	**1,373,841**	1,618,745
Current taxation	33(a)	**40,955**	64,138
Other financial liability	31	**1,468,050**	350,000
		4,483,632	4,806,865
Net current assets		**3,277,441**	1,802,435

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2021 (Expressed in Renminbi)

	Note	2021 RMB'000	2020 RMB'000
Total assets less current liabilities		**8,080,954**	6,391,261
Non-current liabilities			
Interest-bearing borrowings	28	**1,038,000**	591,837
Deferred income	30	**50,306**	58,082
Deferred tax liabilities	33(c)	**100,091**	101,033
		1,188,397	750,952
Net assets		**6,892,557**	5,640,309
Capital and reserves			
Share capital	34(d)	**49,399**	46,186
Reserves		**6,580,846**	5,424,038
Total equity attributable to equity shareholders of the Company		**6,630,245**	5,470,224
Non-controlling interests		**262,312**	170,085
Total equity		**6,892,557**	5,640,309

Approved and authorised for issue by the board of directors on 30 March 2022.

Zhu Xiaokun
Directors

Yan Ronghua
Directors

The notes on pages 123 to 211 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

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	34(b)(ii)	–	–	–	–	–	–	–	–	(206,848)	–	(206,848)
Transfer to reserve	34(e)(vi)	–	–	–	–	–	–	–	93,341	(93,341)	–	–
Placing and subscription of shares	34(d)(iii)	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 123 to 211 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2020 (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 2019 and 1 January 2020		45,766	2,029,869	492	70,041	91,925	(58,812)	58,410	674,597	2,124,059	166,787	5,203,134
Changes in equity for 2020												
Profit for the year		–	–	–	–	–	–	–	–	537,024	3,298	540,322
Other comprehensive income	12	–	–	–	–	–	6,795	(4,840)	–	–	–	1,955
Total comprehensive income		–	–	–	–	–	6,795	(4,840)	–	537,024	3,298	542,277
Dividends approved in respect of the previous year	34(b)(ii)	–	–	–	–	–	–	–	–	(134,091)	–	(134,091)
Transfer to reserve	34(e)(vi)	–	–	–	–	–	–	–	182,237	(182,237)	–	–
Exercise of share options	34(d)(ii)	492	45,946	–	(8,517)	–	–	–	–	–	–	37,921
Repurchase of own shares	34(c)	(72)	(8,932)	72	–	–	–	–	–	–	–	(8,932)
Liquidation of a subsidiary		–	–	–	–	–	–	–	(19,412)	19,412	–	–
Balance at 31 December 2020		46,186	2,066,883	564	61,524	91,925	(52,017)	53,570	837,422	2,364,167	170,085	5,640,309

The notes on pages 123 to 211 form part of these financial statements.

CONSOLIDATED CASH FLOW STATEMENT

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

	Note	2021 RMB'000	2020 RMB'000
Operating activities			
Cash generated from operations	27(b)	**642,793**	1,347,560
Tax paid		**(100,493)**	(40,146)
Net cash generated from operating activities		**542,300**	1,307,414
Investing activities			
Payment for purchase of property, plant and equipment		**(453,465)**	(476,158)
Payment for lease prepayments		**(19,055)**	–
Payment for purchase of other financial assets		**(27,154)**	(1,000)
Proceeds from disposal of other financial assets		**11,890**	718
Acquisition of subsidiaries, net of cash acquired		**–**	(83,437)
(Payment)/proceeds from time and pledged deposits, net		**(1,258,972)**	375,700
Interest received	8(a)	**27,563**	24,345
Dividends received from associates		**10,111**	–
Dividends received from other financial assets	6	**5,077**	3,580
Payment for interest in associates	19	**(7,500)**	(6,407)
Payment for trading securities		**(510)**	(10,655)
Proceeds from disposal of trading securities		**22,010**	3,285
Proceeds/(payment) for structured deposits, net		**850,000**	(850,000)
Proceeds from gains on structured deposits		**29,081**	16,170
Net cash used in investing activities		**(810,924)**	(1,003,859)

CONSOLIDATED CASH FLOW STATEMENT

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

	Note	2021 RMB'000	2020 RMB'000
Financing activities			
Proceeds from interest-bearing borrowings	27(c)	**4,480,470**	4,975,897
Repayment of interest-bearing borrowings	27(c)	**(5,207,503)**	(4,946,811)
Proceeds from contingent redeemable capital contributions in a subsidiary	31	**1,065,000**	350,000
Interest paid		**(106,728)**	(151,870)
Capital contribution from non-controlling shareholders		**85,000**	–
Dividends paid to equity shareholders of the Company	34(b)(ii)	**(206,848)**	(134,091)
Proceeds from exercise of share options	34(d)(ii)	**–**	37,921
Payment for repurchase of shares	34(c)	**–**	(8,932)
Proceeds from placing and subscription	34(d)(iii)	**690,168**	–
Net cash generated from financing activities		**799,559**	122,114
Net increase in cash and cash equivalents		**530,935**	425,669
Cash and cash equivalents at 1 January		**827,246**	398,017
Effect of foreign exchange rate changes		**(1,300)**	3,560
Cash and cash equivalents at 31 December	27(a)	**1,356,881**	827,246

The notes on pages 123 to 211 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 disclosure 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. A summary of the significant accounting policies adopted by the Group is set out 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 2021 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 as set out in the accounting policies hereunder.

(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.

2 Basis of preparation (continued)

(c) Accounting estimates and judgements (continued)

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, *Covid-19-related rent concessions*
- Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16, *Interest rate benchmark reform – phase 2*

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

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements, and have been applied consistently by the Group entities, except as explained in Note 2(d), which addresses changes in 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.

3 Significant accounting policies (continued)

(a) Subsidiaries and non-controlling interests (continued)

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 other comprehensive income as an allocation of the total profit or loss and total comprehensive income 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).

(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.

3 Significant accounting policies (continued)

(b) Associates and joint ventures (continued)

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)).

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).

3 Significant accounting policies (continued)

(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 Note 35(f). These investments are subsequently accounted for as follows, depending on their classification.

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).

3 Significant accounting policies (continued)

(e) Property, plant and equipment

Property, plant and equipment is stated at cost 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)).

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

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 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.

3 Significant accounting policies (continued)

(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 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:

– patents and trademarks	10 years

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

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.

3 Significant accounting policies (continued)

(g) Leased assets (continued)

(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.

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.

3 Significant accounting policies (continued)

(g) Leased assets (continued)

(i) As a lessee (continued)

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).

(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.

3 Significant accounting policies (continued)

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

(i) Credit losses from financial instruments (continued)

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.

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.

3 Significant accounting policies (continued)

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

(i) Credit losses from financial instruments (continued)

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.

3 Significant accounting policies (continued)

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

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

– *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).

– *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.

3 Significant accounting policies (continued)

(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.

(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)).

3 Significant accounting policies (continued)

(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. Receivables are stated at amortised cost using the effective interest method less 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) 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)).

(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) 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).

(o) 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.

3 Significant accounting policies (continued)

(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).

(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.

3 Significant accounting policies (continued)

(q) Income tax (continued)

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.

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.

3 Significant accounting policies (continued)

(q) Income tax (continued)

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 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)

(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.

(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)).

3 Significant accounting policies (continued)

(s) Revenue and other income (continued)

(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) Asset acquisition

Groups of assets acquired and liabilities assumed are assessed to determine if they are business or asset acquisitions. On an acquisition-by-acquisition basis, the Group chooses to apply a simplified assessment of whether an acquired set of activities and assets is an asset rather than business acquisition, when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

When a group of assets acquired and liabilities assumed do not constitute a business, the overall acquisition cost is allocated to the individual identifiable assets and liabilities based on their relative fair values at the date of acquisition. An exception is when the sum of the individual fair values of the identifiable assets and liabilities differs from the overall acquisition cost. In such case, any identifiable assets and liabilities that are initially measured at an amount other than cost in accordance with the Group's policies are measured accordingly, and the residual acquisition cost is allocated to the remaining identifiable assets and liabilities based on their relative fair values at the date of acquisition.

(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

Notes 17, 32(c) and 35(f) contain information about the assumptions and their risk factors relating to goodwill impairment, fair value of share options granted and financial instruments. Other significant sources of estimation uncertainty are as follows:

(a) 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.

(b) 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.

(c) 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.

(d) 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

Revenue represents mainly the sales value of high alloy steel, (including die steel ("DS") and high speed steel ("HSS")), cutting tools, titanium alloy and trading of goods after eliminating intercompany transactions. Further details regarding the Group's revenue 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:

	2021 RMB'000	2020 RMB'000
DS	**2,391,914**	2,351,218
HSS	**1,005,436**	775,501
Cutting tools	**1,057,984**	875,166
Titanium alloy	**263,146**	170,474
Trading of goods	**1,026,393**	1,048,585
	5,744,873	5,220,944

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 (2020: one customer) with whom transactions have exceeded 10% of the Group's revenue. In 2020 revenue from trading of goods to this customer amounted to RMB702,303,000 and arose in the PRC in which trading of goods segment is active. Details of concentrations of credit risk arising from this customer are set out in Note 35(a).

(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 has five reportable segments, as described below, which are the Group's product divisions. For each of the product divisions, the Chairman (the chief operating decision maker) reviews internal management reports on at least a monthly basis. No operating segments have been aggregated to form the following reportable segments. The following summary describes the operations in each of the Group's 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.

(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, financial assets at fair value through profit or loss, pledged deposits, time deposits, cash and cash equivalents, deferred tax assets 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, current taxation, deferred tax liabilities, other financial liability 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 2021 and 2020 is set out below.

	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

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

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

	2020					
	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	2,351,218	775,501	875,166	170,474	1,048,585	5,220,944
Inter-segment revenue	–	493,172	–	–	–	493,172
Reportable segment revenue	2,351,218	1,268,673	875,166	170,474	1,048,585	5,714,116
Reportable segment profit (adjusted EBIT)	410,079	284,953	103,195	12,981	391	811,599
Reportable segment assets	4,639,627	1,998,369	1,285,545	521,917	7	8,445,465
Reportable segment liabilities	1,018,505	339,601	206,729	71,653	–	1,636,488

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

Revenue	**2021** **RMB'000**	2020 RMB'000
Reportable segment revenue	**6,048,931**	5,714,116
Elimination of inter-segment revenue	**(304,058)**	(493,172)
Consolidated revenue (Note 5(a))	**5,744,873**	5,220,944

Profit	**2021** **RMB'000**	2020 RMB'000
Reportable segment profit	**908,000**	811,599
Net finance costs	**(131,484)**	(127,309)
Share of profits/(losses) of associates	**12,543**	(2,195)
Share of profits of joint ventures	**9,418**	3,526
Unallocated head office and corporate expenses	**(46,822)**	(63,804)
Consolidated profit before taxation	**751,655**	621,817

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

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

Assets	2021 RMB'000	2020 RMB'000
Reportable segment assets	**8,848,626**	8,445,465
Interest in associates	**61,814**	55,573
Interest in joint ventures	**38,699**	28,350
Other financial assets	**185,310**	135,810
Deferred tax assets	**42,209**	44,170
Financial assets at fair value through profit or loss	**1,651**	877,117
Pledged deposits	**244,191**	384,700
Time deposits	**1,749,481**	350,000
Cash and cash equivalents	**1,356,881**	827,246
Unallocated head office and corporate assets	**35,724**	49,695
Consolidated total assets	**12,564,586**	11,198,126

Liabilities	2021 RMB'000	2020 RMB'000
Reportable segment liabilities	**1,402,812**	1,636,488
Interest-bearing borrowings	**2,638,786**	3,365,819
Other financial liability	**1,468,050**	350,000
Current taxation	**40,955**	64,138
Deferred tax liabilities	**100,091**	101,033
Unallocated head office and corporate liabilities	**21,335**	40,339
Consolidated total liabilities	**5,672,029**	5,557,817

5 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(iii) Geographical information

The Group's business is managed on a worldwide basis, but participates in four principal economic geographies, the PRC, North America, Europe and Asia (other than the PRC).

In presenting geographical information, segment revenue is based on the geographical location of customers. 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.

Revenue	2021 RMB'000	2020 RMB'000
The PRC	**3,358,645**	3,598,844
North America	**730,852**	750,489
Europe	**983,936**	591,440
Asia (other than the PRC)	**582,803**	270,904
Others	**88,637**	9,267
Total	**5,744,873**	5,220,944

6 Other income

	Note	2021 RMB'000	2020 RMB'000
Government grants	(i)	**66,017**	18,682
Sales of scrap materials		**4,356**	9,807
Dividend income	(ii)	**5,077**	3,580
Unrealised fair value changes of other financial assets		**11,502**	–
Realised and unrealised gains on structured deposits		**21,492**	23,759
Net realised and unrealised gains on trading securities		**3,816**	9,393
Indemnity income		**5,031**	–
Gains from disposal of interest in associates		**1,125**	–
Others		**10,971**	5,208
		129,387	70,429

Notes:

(i) The subsidiaries of the Group, located in the PRC collectively received unconditional grants amounting to RMB58,241,000 (2020: RMB11,866,000) from the local government to reward their contribution to the local economy and encourage technology innovation. The Group also recognised amortisation of government grants related to assets of RMB7,776,000 (2020: RMB6,816,000) during the year ended 31 December 2021 (see Note 30).

(ii) The Group received dividends totalling RMB5,077,000 (2020: RMB3,580,000) from listed equity investments and unlisted units in investment funds (see Note 21).

7 Other expenses

	2021 RMB'000	2020 RMB'000
Provision for loss allowance on trade and other receivables	**5,318**	6,081
Net losses on disposal of property, plant and equipment	**3,002**	2
Net foreign exchange losses	**36,075**	23,723
Charitable donations	**2,610**	3,205
Unrealised fair value changes of other financial assets	**–**	1,892
Others	**269**	521
	47,274	35,424

8 Profit before taxation

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

(a) Net finance costs

	2021 RMB'000	2020 RMB'000
Interest income	**(27,563)**	(24,345)
Finance income	**(27,563)**	(24,345)
Interest on bank loans	**113,261**	172,284
Interest expenses arising on other financial liability	**53,050**	–
Less: interest expenses capitalised into property, plant and equipment under construction*	**(7,264)**	(20,630)
Finance expenses	**159,047**	151,654
Net finance costs	**131,484**	127,309

* The borrowing costs have been capitalised at a rate of 4.10% per annum (2020: 5.23%).

(b) Staff costs

	2021 RMB'000	2020 RMB'000
Salaries, wages and other benefits	**339,922**	242,008
Contributions to defined contribution retirement plans	**20,147**	25,106
	360,069	267,114

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	2021 RMB'000	2020 RMB'000
Cost of inventories*	23(b)	**4,339,675**	4,006,964
Depreciation of property, plant and equipment	14	**294,377**	265,788
Amortisation of lease prepayments (right-of-use assets)	15	**3,417**	2,935
Amortisation of intangible assets	16	**1,900**	158
Provision for loss allowance on trade and other receivables		**5,318**	6,081
Provision for write-down of inventories	23(b)	**2,486**	9,461
Auditor's remuneration			
– audit services		**4,030**	2,850
– other services		**–**	1,000

* Cost of inventories includes amounts relating to staff costs, depreciation expenses and provision of write-down of inventories, 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:

	2021 RMB'000	2020 RMB'000
Current tax		
Provision for PRC taxes (Note 33(a))	**72,340**	77,328
Provision for/(reversal of) Hong Kong Profits Tax (Note 33(a))	**3,642**	(1,267)
Provision for Thailand Corporate Income Tax (Note 33(a))	**1,328**	101
	77,310	76,162
Deferred tax		
Origination and reversal of temporary differences	**2,715**	5,333
	80,025	81,495

(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.

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

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

(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 2021 available to enterprises which qualify as a High and New Technology Enterprise (2020: 15%).

The statutory corporate income tax rate applicable to the Group's other operating subsidiaries in the PRC is 25% (2020: 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.

(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% (2020: 16.5%) for the year ended 31 December 2021.

(iv) Pursuant to the income tax rules and regulations of Thailand, the Group's subsidiaries in Thailand are liable to Thailand Corporate Income Tax at a rate of 20% (2020: 20%) for the year ended 31 December 2021.

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

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

	2021 **RMB'000**	2020 RMB'000
Profit before taxation	**751,655**	621,817
Notional tax on profit before taxation, calculated using the PRC statutory tax rate of 25% (2020: 25%)	**187,914**	155,454
Effect of preferential tax rates	**(65,478)**	(62,646)
Effect of different tax rates	**(9,331)**	(222)
Effect of change in tax rates	**–**	(171)
Tax effect of unused tax losses not recognised	**2,053**	38
Tax effect of previously unrecognised tax losses now utilised	**(552)**	(2,735)
Tax effect of previously unrecognised temporary differences now recognised	**(6,176)**	–
Tax effect of non-deductible expenses	**8,340**	6,629
Tax effect of non-taxable income	**(4,033)**	(682)
Effect of withholding tax on dividends	**(2,431)**	13,897
Provision of withholding tax arising from intra-group reorganisation	**–**	9,935
Tax effect of bonus deduction for research and development expenses	**(37,533)**	(29,475)
Under/(over)-provision in respect of prior year	**7,252**	(8,527)
Actual tax expense	**80,025**	81,495

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	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**

	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	2020 Total RMB'000
Executive directors						
Zhu Xiaokun	–	206	–	490	–	696
Wu Suojun	–	222	7	436	–	665
Yan Ronghua	–	180	7	167	–	354
Jiang Guangqing	–	177	4	128	–	309
Independent non-executive directors						
Wang Xuesong	81	–	–	–	–	81
Gao Xiang	36	–	–	–	–	36
Lee Cheuk Yin, Dannis	81	–	–	–	–	81
Total	198	785	18	1,221	–	2,222

11 Individuals with highest emoluments

Of the five individuals with the highest emoluments, two (2020: one) are directors whose emoluments are disclosed in Note 10. The aggregate of the emoluments in respect of the other three (2020: four) individuals are as follows:

	2021 RMB'000	2020 RMB'000
Salaries, allowances and benefits in kind	**1,908**	2,119
Discretionary bonuses	**1,105**	1,322
Contributions to retirement benefit schemes	**22**	26
	3,035	3,467

The emoluments of the three (2020: four) individuals with the highest emoluments are within the following bands:

	2021 Number of individuals	2020 Number of individuals
HKD nil to HKD1,000,000	**–**	3
HKD1,000,001 to HKD1,500,000	**3**	1

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 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**
For the year ended 31 December 2020			
Before-tax amount	(4,080)	6,795	2,715
Tax expense	(760)	–	(760)
Net-of-tax amount	(4,840)	6,795	1,955

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 RMB664,371,000 (2020: RMB537,024,000) and the weighted average of 2,723,021,978 ordinary shares (2020: 2,567,069,162 ordinary shares) in issue during the year, calculated as follows:

Weighted average number of ordinary shares

	2021	2020
Issued ordinary shares at 1 January	**2,595,000,000**	2,569,050,000
Effect of placing and subscription of shares	**128,021,978**	–
Effect of repurchase of shares	**–**	(2,144,789)
Effect of exercise of share options (Note 32)	**–**	163,951
Weighted average number of ordinary shares at 31 December	**2,723,021,978**	2,567,069,162

(b) Diluted earnings per share

The diluted earnings per share for 2021 and 2020 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 2020	–	1,360,448	3,854,607	11,336	61,269	354,399	5,642,059
Business combination (Note 39)	–	41,988	15,257	–	4,237	–	61,482
Additions	15,064	792	42,737	697	687	416,181	476,158
Transfers	–	(336,039)	667,583	(3,292)	(14,020)	(314,232)	–
Disposals	–	–	(9,188)	(692)	(6)	–	(9,886)
Exchange adjustment	175	–	–	–	(2)	–	173
Balance at 31 December 2020	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
Accumulated depreciation:							
Balance at 1 January 2020	–	(370,143)	(1,354,399)	(5,371)	(45,258)	–	(1,775,171)
Charge for the year	–	(46,803)	(213,992)	(1,236)	(3,757)	–	(265,788)
Transfers	–	28,580	(42,656)	2,412	11,664	–	–
Written back on disposals	–	–	7,121	398	–	–	7,519
Balance at 31 December 2020	–	(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)
Net book value:							
At 31 December 2021	13,420	765,298	3,286,601	6,017	23,589	178,441	4,273,366
At 31 December 2020	15,239	678,823	2,967,070	4,252	14,814	456,348	4,136,546

15 Lease prepayments

	RMB'000
Cost:	
At 1 January 2020	136,822
Business combination (Note 39)	37,158
At 31 December 2020	173,980
Additions	19,055
At 31 December 2021	193,035
Accumulated amortisation:	
At 1 January 2020	(23,469)
Charge for the year	(2,935)
At 31 December 2020	(26,404)
Charge for the year	(3,417)
At 31 December 2021	(29,821)
Net book value:	
At 31 December 2021	163,214
At 31 December 2020	147,576

The amortisation charge for the year is included in "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:

	2021 **RMB'000**	2020 RMB'000
Lease prepayments, carried at depreciated cost in the PRC, with remaining lease term of between 10 and 50 years	**163,214**	147,576

The analysis of expense items in relation to leases recognised in profit or loss is as follows:

	2021 **RMB'000**	2020 RMB'000
Amortisation charge of right-of-use assets by class of underlying asset:		
Lease prepayments	**3,417**	2,935
Expenses relating to short-term leases and low-value assets	**736**	255

During the year ended 31 December 2021, additions to right-of-use assets were RMB19,055,000 for purchase of leasehold land (2020: RMB37,158,000 for leasehold land acquired through business combination). Details of total cash outflows for leases are set out in Note 27(d).

16 Intangible assets

	Patents and trademarks RMB'000
Cost:	
At 1 January 2020	–
Business combination (Note 39)	19,000
At 31 December 2020 and 1 January 2021	19,000
Additions	–
At 31 December 2021	19,000
Accumulated amortisation:	
At 1 January 2020	–
Charge for the year	(158)
At 31 December 2020 and 1 January 2021	(158)
Charge for the year	(1,900)
At 31 December 2021	(2,058)
Net book value:	
At 31 December 2021	16,942
At 31 December 2020	18,842

17 Goodwill

	2021 **RMB'000**	2020 RMB'000
Cost:		
Balance at 1 January and 31 December	**21,959**	21,959
Accumulated impairment losses:		
Balance at 1 January and 31 December	**–**	–
Carrying amount:		
At 1 January and 31 December	**21,959**	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:

	2021 **RMB'000**	2020 RMB'000
DS	**21,959**	21,959

The recoverable amounts of the CGU was determined based on value-in-use calculations. The key assumptions for the value-in-use calculations are those regarding the discount rate, growth rate of revenue and gross margin. The Group prepared cash flow forecasts derived from the two-year financial budgets and extrapolated cash flows for the following thirteen years based on an estimated growth rate of revenue of 5% – 10% (2020: 5% – 10%), a pre-tax discount rate of 9.3% (2020: 9.8%) and a gross margin of 15% – 20% (2020: 15% – 20%). The growth rate used does not exceed the long-term average growth rate for the business in which the CGU operates.

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 amount of the CGU is higher than its carrying amount 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 information 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		Issued and fully paid-up/ registered capital	Principal activity
		Direct	Indirect		
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	–	99%	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 (Note 39)	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

(Expressed in Renminbi unless otherwise indicated)

18 Interest in subsidiaries (continued)

Name of company	Place and date of incorporation	Proportion of ownership interest		Issued and fully paid-up/ registered capital	Principal activity
		Direct	Indirect		
Precision Tools	The PRC, 25 January 2016	–	100%	HKD438,868,708/ HKD600,000,000	Research and development, manufacture and sale of cutting tools related products
Danyang Taifeng Precision Machinery Tools Company Limited	The PRC, 5 February 2016	–	63.69%	RMB20,820,000/ RMB26,000,000	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
Tiangong Special Steel Company Limited	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	–	100%	RMB1,500,000/ RMB1,500,000	Sale of cutting tools related products
Tiangong Precision Tools (Thailand) Company Limited	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	Business management and related advisory services
Jiangsu Tiangong New Materials Company Limited	The PRC, 29 September 2020	–	100%	RMB200,000,000/ 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%	RMB20,000,000/ RMB30,000,000	Research and development, manufacture and sale of special steel related product
Jiangsu Tiangong Youcai Technology Company Limited	The PRC, 25 August 2021	–	70%	–/ RMB30,000,000	Research and development, manufacture and sale of titanium related product
Jiangsu Tiangong Carbide Technology Company Limited	The PRC, 21 December 2021	–	100%	–/ RMB26,000,000	Manufacture and sale of carbide cutting tools
Jiangsu Tiangong Mould Steel R&D Center Company Limited (Note)	The PRC, 5 March 2012	–	–	–	Research and development of alloy steel products

Note:

Jiangsu Tiangong Mould Steel R&D Center Company Limited completed its deregistration on 15 September 2021.

18 Interest in subsidiaries (continued)

The following table sets 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.

	2021 RMB'000	2020 RMB'000
NCI percentage	**25.97%**	25.97%
Current assets	**607,623**	603,029
Non-current assets	**110,267**	120,332
Current liabilities	**(34,973)**	(56,769)
Non-current liabilities	**(13,941)**	(17,219)
Net assets	**668,976**	649,373
Carrying amount of NCI	**169,411**	164,320
Revenue	**279,893**	182,030
Profit for the year	**20,343**	12,119
Total comprehensive income	**20,343**	12,119
Profit allocated to NCI	**5,283**	3,147
Dividend paid to NCI	**–**	–
Cash flows from operating activities	**18,571**	58,118
Cash flows from investing activities	**(2,326)**	72,890
Cash flows from financing activities	**–**	–

(Expressed in Renminbi unless otherwise indicated)

19 Interest in associates

The following sets out information on the particulars of associates, all of which are unlisted corporate entities whose 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")	(i)	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")	(ii)	Incorporated	United States of America	USD8,625,000	19.75%	–	19.75%	Sale of special steel related products
Fusion TG Canada Inc ("TGC")	(iii)	Incorporated	Canada	Canada dollars ("CAD") 6,300,000	20%	20%	–	Sale of special steel related products
Aceros T&C Company Limited ("ATC")	(iv)	Incorporated	Mexico	–	15%	–	15%	Sale of special steel related products
Kushan Tianzhong New Materials Technology Co., Ltd ("TZNMT")	(v)	Incorporated	The PRC	RMB2,800,000	40%	–	40%	Sale of special steel related products
Tiantai Mould Technology (Kunshan) Co., Ltd ("TTMT")	(vi)	Incorporated	The PRC	RMB3,200,000	40%	–	40%	Sale of special steel related products
Chengdu Tiante Mould Technology Co., Ltd. ("CDTT")	(vii)	Incorporated	The PRC	RMB4,800,000	40%	–	40%	Sale of special steel related products
Soloman Tiangong Alloy Material (Danyang) Co., Ltd. ("Soloman")	(viii)	Incorporated	The PRC	RMB1,500,000	30%	–	30%	Sales of titanium alloy materials
Jiangsu Ningxing Tiangong Mould Technology Company Limited ("JS NXTG")	(ix)	Incorporated	The PRC	–	–	–	–	Sale of special steel related products
Shenzhen 51 Mocai Technology Company Limited ("51 Mocai")	(x)	Incorporated	The PRC	–	–	–	–	Sale of special steel related products

19 Interest in associates (continued)

Notes:

(i) XZG is the sole distributor of the Group' products in Taiwan.

(ii) SBSMH, a distributor of special steel products in the USA, enables the Group to have exposure to the US market through local experience.

(iii) TGC is the sole distributor of the Group's products in Canada.

(iv) On 22 November 2016, TG Tools formed associate, ATC, with Citma Metals Co., Ltd. in Mexico. The associate is principally engaged in sale of special steel related products. As at 31 December 2021, TG Tools had not contributed any capital into ATC. All inventories of ATC are supplied by the Group. The directors of the Company consider that the Group can exercise significant influence over ATC and therefore ATC is accounted for as an associate of the Group.

(v) On 10 December 2020, TG Aihe acquired 40% equity interest in TZNMT from two individuals and a related party company controlled by the ultimate controlling shareholder of the Group. TZNMT is principally engaged in downstream processing and distribution of special steel.

(vi) On 1 September 2020, TG Aihe formed an associate TTMT with a third-party moulding company in the PRC. TTMT is engaged in downstream processing and distribution of special steel.

(vii) On 4 January 2021, TG Aihe established an associate CDTT with three individuals. CDTT is principally engaged in downstream processing and distribution of special steel.

(viii) On 8 March 2021, TG Tech formed an associate Soloman with a third-party alloy material company in the PRC. Soloman is engaged in downstream processing and distribution of titanium and titanium alloy materials.

(ix) 51 Mocai is a distributor of special steel products in the PRC. On 15 December 2021, the Group disposed all of its equity interest in 51 Mocai at a consideration of RMB6.6 million.

(x) JS NXTG is a distributor of special steel products in the PRC. On 30 December 2021, the Group disposed all of its equity interest in JS NXTG at a consideration of RMB3 million.

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:

	2021 **RMB'000**	2020 RMB'000
Aggregate carrying amount of individually immaterial associates in the consolidated financial statements	**61,814**	55,573

	2021 **RMB'000**	2020 RMB'000
Aggregate amounts of the Group's share of those associates'		
– Gain/(loss) from continuing operations	**12,543**	(2,195)
– Other comprehensive income	**(1,599)**	(2,105)
Total comprehensive income	**10,944**	(4,300)

(Expressed in Renminbi unless otherwise indicated)

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	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	
TG Korea Company Limited ("TG Korea")	(i)(vi)	Incorporated	The Republic of Korea	USD1,000,000	70%	–	70%	Sale of special steel related products
TGK Special Steel PVT Limited ("TGK")	(ii)	Incorporated	India	USD2,000,000	50%	–	50%	Sale of special steel related products
TG Czech S.R.O. (Formerly known as "Czechtools and Materials S.R.O.") ("CTM")	(iii)	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")	(iv)(vi)	Incorporated	Italy	Euro ("EUR") 100,000	60%	–	60%	Sale of special steel related products
TG Middle East Celik San Ltd. ("TGME")	(v)	Incorporated	Turkey	EUR1,000,000	50%	–	50%	Sale of special steel related products

Notes:

(i) TG Korea is the sole distributor of the Group's special steel products in Korea.

(ii) TGK is the sole distributor of the Group's special steel products in India.

(iii) CTM is the sole distributor of the Group's special steel products in the Czech Republic.

(iv) FSS is the sole distributor of the Group's special steel products in Italy.

(v) TGME is the sole distributor of the Group's special steel products in Turkey.

(vi) According to TG Korea's and FSS's joint venture agreements, no single shareholder is in a position to control the shareholders' meeting nor no single director appointed by either shareholder is in a position to control the board of directors. Therefore, although the Group holds more than 50% equity interests in TG Korea and FSS, the directors of the Company consider that the Group does not have the ability to use its power over TG Korea and FSS to affect its returns through its involvement and deem them to be joint ventures of the Group rather than subsidiaries.

20 Interest in joint ventures (continued)

Aggregate information of joint ventures that are not individually material:

	2021 RMB'000	2020 RMB'000
Aggregate carrying amount of individually immaterial joint ventures in the consolidated financial statements	**38,699**	28,350

	2021 RMB'000	2020 RMB'000
Aggregate amount of the Group's share of those joint ventures'		
– Profits from continuing operations	**9,418**	3,526
– Other comprehensive income	**931**	(2,814)
Total comprehensive income	**10,349**	712

21 Other financial assets

	Note	2021 RMB'000	2020 RMB'000
Equity securities designated at FVOCI (non-recycling)			
– Listed in the PRC	(i)	**126,930**	102,950
– Unlisted equity securities	(ii)	**6,240**	7,940
Financial asset measured at fair value through profit or loss (FVPL)			
– Unlisted units in investment funds	(iii)	**52,140**	24,920
		185,310	135,810

Notes:

(i) The listed equity securities are shares in Bank of Jiangsu Co., Ltd., a company listed on the Mainboard of the Shanghai Stock Exchange ("SESH") 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 RMB4,795,000 were received from these investments during the year ended 31 December 2021 (2020: RMB3,580,000).

(ii) The unlisted equity securities are shares in Xiamen Chuangfeng Yizhi Investment Management Partnership, a partnership incorporated in the PRC and equity interest in Nanjing Xiaomuma Technology Co., Ltd., a company incorporated in the PRC. The Group designated these investments at FVOCI (non-recycling), as the investments are held for strategic purposes. No dividends were received from these investments during the year ended 31 December 2021 (2020: RMB nil).

(iii) The unlisted units in investment fund are interests in Jinan Financial Fosun Weishi Equity Investment Fund Partnership and CICC Jiatai Private Equity Fund III, (Shenzhen) Partnership (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 RMB282,000 were received from these investments during the year ended 31 December 2021 (2020: RMB nil).

22 Financial assets at fair value through profit or loss

	Note	2021 RMB'000	2020 RMB'000
Trading securities	(i)	**1,651**	19,528
Structured deposits	(ii)	**–**	857,589
		1,651	877,117

Notes:

(i) 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.

(ii) The structured deposits are the Group's subscriptions for wealth management products offered by financial institutions in the PRC. There are no fixed or determinable returns on these structured deposits.

23 Inventories

(a) Inventories in the consolidated statement of financial position comprise:

	2021 RMB'000	2020 RMB'000
Raw materials	**79,577**	159,384
Work in progress	**1,193,409**	873,208
Finished goods	**1,004,624**	655,779
	2,277,610	1,688,371

(b) The analysis of the amount of inventories recognised as an expense and included in profit or loss is as follows:

	2021 RMB'000	2020 RMB'000
Carrying amount of inventories sold	**4,337,189**	3,997,503
Provision for write-down of inventories	**2,486**	9,461
	4,339,675	4,006,964

24 Trade and other receivables

	2021 RMB'000	2020 RMB'000
Trade receivables	**1,305,126**	1,253,802
Bills receivable	**663,156**	850,660
Less: loss allowance	**(84,948)**	(87,295)
Net trade and bills receivable	**1,883,334**	2,017,167
Prepayments	**132,280**	338,813
Non-trade receivables	**122,278**	130,400
Less: loss allowance	**(6,633)**	(4,514)
Net prepayments and non-trade receivables	**247,925**	464,699
	2,131,259	2,481,866

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 2021, bills receivable of RMB133,219,000 (2020: RMB850,660,000) 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 2021, the Group endorsed certain bills receivable with a total carrying amount of RMB218,614,000 (2020: RMB334,638,000) 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 2021, 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 2021, 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 RMB204,753,000 (2020: RMB392,526,000).

As at 31 December 2021, bills receivable of RMB208,000,000 (2020: RMB215,929,000) 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 RMB175,195,000 (2020: RMB160,835,000) have been pledged to a bank as security for the Group's bank loans as disclosed in Note 28.

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:

	2021 RMB'000	2020 RMB'000
Within 3 months	**1,498,858**	1,551,164
4 to 6 months	**108,920**	150,412
7 to 12 months	**116,536**	152,501
1 to 2 years	**150,321**	160,480
Over 2 years	**8,699**	2,610
	1,883,334	2,017,167

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 35(a).

25 Pledged deposits

As at 31 December 2021, bank deposits of RMB244,191,000 (2020: RMB384,700,000) have been pledged to banks as security for the Group to issue bank acceptance bills and other banking facilities (as described in Note 28). 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 2021, time deposits of RMB1,749,481,000 (2020: RMB350,000,000) 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 2021 and 2020, 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.

	2021 RMB'000	2020 RMB'000
Cash at bank and on hand	**1,356,881**	827,246

27 Cash and cash equivalents and other cash flow information (continued)

(b) Reconciliation of profit before taxation to cash generated from operations:

	Note	2021 RMB'000	2020 RMB'000
Profit before taxation		**751,655**	621,817
Adjustments for:			
Depreciation of property, plant and equipment	8(c)	**294,377**	265,788
Amortisation of lease prepayments	8(c)	**3,417**	2,935
Amortisation of intangible assets	8(c)	**1,900**	158
Interest income	8(a)	**(27,563)**	(24,345)
Interest expenses	8(a)	**159,047**	151,654
Net losses on disposal of property, plant and equipment	7	**3,002**	2
Dividends income	6	**(5,077)**	(3,580)
Unrealised fair value changes of other financial assets	6/7	**(11,502)**	1,892
Net realised and unrealised gains on trading securities	6/7	**(3,816)**	(9,393)
Realised and unrealised gains on structured deposits	6	**(21,492)**	(23,759)
Gains from disposals of interest in associates	6	**(1,125)**	–
Provision for loss allowance on trade and other receivables	8(c)	**5,318**	6,081
Share of (profits)/losses of associates	19	**(12,543)**	2,195
Share of profits of joint ventures	20	**(9,418)**	(3,526)
Operating profit before changes in working capital		**1,126,180**	987,919
Change in inventories		**(589,239)**	69,708
Change in trade and other receivables		**353,646**	296,163
Change in trade and other payables		**(240,018)**	(6,434)
Change in deferred income		**(7,776)**	204
Cash generated from operations		**642,793**	1,347,560

27 Cash and cash equivalents (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
At 1 January 2020	3,251,733
Business combination (Note 39)	85,000
Proceeds from interest-bearing borrowings	4,975,897
Repayment of interest-bearing borrowings	(4,946,811)
Changes from financing cash flows	114,086
At 31 December 2020 and 1 January 2021	3,365,819
Proceeds from interest-bearing borrowings	4,480,470
Repayment of interest-bearing borrowings	(5,207,503)
Changes from financing cash flows	(727,033)
At 31 December 2021	2,638,786

(d) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2021 RMB'000	2020 RMB'000
Within operating cash flows	**736**	255
Within investing cash flows	**19,055**	–
	19,791	255

27 Cash and cash equivalents (continued)

(d) Total cash outflow for leases (continued)

These amounts relate to the following:

	2021 RMB'000	2020 RMB'000
Lease rentals paid	**736**	255
Purchase of leasehold land	**19,055**	–
	19,791	255

28 Interest-bearing borrowings

	Note	2021 RMB'000	2020 RMB'000
Current			
Secured bank loans	(i)	**157,544**	456,564
Unsecured bank loans	(ii)	**1,015,895**	1,466,974
Current portion of non-current unsecured bank loans		**427,347**	850,444
		1,600,786	2,773,982
Non-current			
Unsecured bank loans	(iii)	**1,465,347**	1,442,281
Less: Current portion of non-current unsecured bank loans		**(427,347)**	(850,444)
		1,038,000	591,837
		2,638,786	3,365,819

Notes:

(i) Current secured bank loans are secured by pledged deposits, certain trade receivables and sales contracts at annual interest rates ranging from 0.76% to 0.82% (2020: 0.75 to 5.66%) per annum.

(ii) Current unsecured bank loans carry interest at annual rates ranging from 0.90% to 4.75% (2020: 0.90% to 5.22%) per annum and are all repayable within one year.

Current unsecured bank loans of RMB nil (2020: RMB45,000,000) were guaranteed by a third party company, which is controlled by one of the former ultimate non-controlling shareholders of Weijian Tools at 31 December 2021.

(iii) Non-current unsecured bank loans carry interest at annual rates ranging from 3.85% to 4.75% (2020: 2.70% to 5.25%) per annum.

28 Interest-bearing borrowings (continued)

The current and non-current portion of the Group's non-current bank loans were repayable as follows:

	2021 RMB'000	2020 RMB'000
Within 1 year	**427,347**	850,444
Over 1 year but less than 2 years	**579,000**	516,837
Over 2 years but less than 5 years	**459,000**	75,000
	1,465,347	1,442,281

As at 31 December 2020 and 2021, the Group's banking facility with one bank is subject to the fulfilment of a covenant 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 35(b).

29 Trade and other payables

	2021 RMB'000	2020 RMB'000
Trade and bills payable	**1,181,988**	1,423,598
Contract liabilities	**29,505**	37,351
Non-trade payables and accrued expenses	**162,348**	157,796
	1,373,841	1,618,745

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:

	2021 RMB'000	2020 RMB'000
Within 3 months	**608,438**	695,190
4 to 6 months	**223,973**	200,952
7 to 12 months	**304,886**	477,115
1 to 2 years	**22,688**	15,044
Over 2 years	**22,003**	35,297
	1,181,988	1,423,598

30 Deferred income

Deferred income consists of conditional government grants received for completion of certain construction projects. During the year ended 31 December 2021, the Group received new conditional government grants of RMB nil (2020: RMB7,020,000) to support the capital investments of the Group. As at 31 December 2021, the carrying amount of deferred income in respect of government grants after amortisation (Note 6(i)) amounted to RMB50,306,000 (2020: RMB58,082,000).

31 Other financial liability

The analysis of the carrying amount of other financial liability is as follows:

	2021 **RMB'000**	2020 RMB'000
Contingent redeemable capital contributions in a subsidiary	**1,468,050**	350,000

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.

32 Equity settled share-based transactions

The Group has a share option scheme which was adopted on 7 July 2007 and expired on 6 July 2017 and adopted a new share option scheme on 26 May 2017, whereby the directors of the Company are authorised, at their discretion, to invite employees of the Group, including directors of any company in the Group, to take up options to subscribe for shares of the Company. Each option gives the holder the right to subscribe for one ordinary share in the Company.

(Expressed in Renminbi unless otherwise indicated)

32 Equity settled share-based transactions (continued)

(a) The terms and conditions of the grants are as follows:

	Number of instruments	Vesting conditions	Contractual life of options
Options granted to directors:			
– on 18 August 2014	1,967,000	Immediately on 19 August 2014	5 years and expires at close of business on 18 August 2019
– on 11 January 2018 (Lot A)	2,550,000	On 31 March 2019 and subject to performance conditions (Note)	1.97 years and expires at close of business on 31 December 2019
– on 11 January 2018 (Lot B)	2,550,000	On 31 March 2020 and subject to performance conditions (Note)	2.97 years and expires at close of business on 31 December 2020
Options granted to employees:			
– on 18 August 2014	20,180,000	Immediately on 19 August 2014	5 years and expires at close of business on 18 August 2019
– on 11 January 2018 (Lot A)	27,450,000	On 31 March 2019 and subject to performance conditions (Note)	1.97 years and expires at close of business on 31 December 2019
– on 11 January 2018 (Lot B)	27,450,000	On 31 March 2020 and subject to performance conditions (Note)	2.97 years and expires at close of business on 31 December 2020
Total share options granted	82,147,000		

Note:

The share options granted on 11 January 2018 shall be vested when the following performance conditions are satisfied:

- If the consolidated audited net profit of the Company for the year ended 31 December 2018 represents an increase of 50% or more as compared to that of the year ended 31 December 2017, the vesting date will be 31 March 2019 for 50% of the total share options granted.
- If the consolidated audited net profit of the Company for the year ended 31 December 2019 represents an increase of 50% or more as compared to that of the year ended 31 December 2018 the vesting date will be 31 March 2020 for the rest of the total share options granted.

(Expressed in Renminbi unless otherwise indicated)

32 Equity settled share-based transactions (continued)

(b) The number and weighted average exercise prices of share options are as follows:

	2021		2020	
	Weighted average exercise price	**Number of options**	Weighted average exercise price	Number of options
Outstanding at the beginning of the year	–	–	HKD1.500	30,000,000
Granted during the year	–	–	–	–
Exercised during the year	–	–	HKD1.500	(30,000,000)
Forfeited during the year	–	–	–	–
Outstanding at the end of the year	–	–	–	–
Exercisable at the end of the year	–	–	–	–

There were no share options that could be exercised during the year and the weighted average share price at the date of exercise of the share options exercised during 2020 was HKD3.350.

There were no share options outstanding as at 31 December 2021 and 2020.

(Expressed in Renminbi unless otherwise indicated)

32 Equity settled share-based transactions (continued)

(c) Fair values of share options and assumptions:

The fair values of services received in return for share options granted is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on a binomial lattice model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the binomial lattice model.

	Share options granted on 18 August 2014	Share options granted on 11 January 2018 (Lot A)	Share options granted on 11 January 2018 (Lot B)
Fair value at grant date	HKD0.59 per share option	HKD0.23 per share option	HKD0.34 per share option
Grant date share price	HKD1.78 per share	HKD1.29 per share	HKD1.29 per share
Exercise price	HKD1.78 per share	HKD1.50 per share	HKD1.50 per share
Expected volatility	48.17%	44.31%	49.44%
Contractual option life	5 years	1.97 years	2.97 years
Dividend yield	3.04%	1.76%	1.76%
– Risk-free interest rate	1.22%	1.29%	1.51%
Exercise multiple			
– Directors:	2.800	1.788	1.788
– Management:	2.800	–	–
– Employees:	2.200	1.768	1.768

The expected volatility is based on the historical volatility of the Company over the contractual life of the options as at the date of valuation. Expected dividend yield is based on historical dividend yield. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options were granted under service conditions. The conditions have not been taken into account in the grant-date fair value measurement of the services received. There were no market conditions associated with the share options granted.

33 Income tax in the consolidated statement of financial position

(a) Current taxation in the consolidated statement of financial position represents:

	2021 RMB'000	2020 RMB'000
At the beginning of the year	**64,138**	28,122
Provision for PRC taxes for the year	**72,340**	77,328
Provision/(reversal) for Hong Kong Profits Tax for the year	**3,642**	(1,267)
Provision for Thailand Corporate Income Tax for the year	**1,328**	101
Hong Kong Profits Tax paid	**(9)**	(7,589)
Thailand Corporate Income Tax paid	**(754)**	(178)
PRC taxes paid	**(99,730)**	(32,379)
At the end of the year	**40,955**	64,138

(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	Total RMB'000
At 1 January 2020	4,408	14,165	14,150	4,386	–	37,109
Business combination (Note 39)	389	–	186	–	–	575
(Charged)/credited to profit or loss	(214)	5,187	546	967	–	6,486
At 31 December 2020 and 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	325	16,794	13,613	6,022	5,455	42,209

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 RMB10,161,000 (2020: RMB13,881,000) 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.

33 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	Deductible capitalised borrowing costs	Revaluation of equity securities	Fair value adjustment arising from business combination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2020	8,704	53,166	12,782	–	74,652
Business combination (Note 39)	–	–	–	13,802	13,802
Charged/(credited) to profit or loss	10,295	2,067	(473)	(70)	11,819
Charged to reserves	–	–	760	–	760
At 31 December 2020 and 1 January 2021	18,999	55,233	13,069	13,732	101,033
Charged/(credited) to profit or loss	(2,431)	1,170	2,876	(861)	754
Credited to reserves	–	–	(1,696)	–	(1,696)
At 31 December 2021	16,568	56,403	14,249	12,871	100,091

As at 31 December 2021, deferred tax liabilities of RMB16,568,000 (2020: RMB18,999,000) 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 RMB177,031,000 (2020: RMB146,293,000) 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.

34 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 2020		45,766	2,029,869	492	11,712	5,951	(535,107)	1,558,683
Total comprehensive income for the year		–	–	–	–	(118)	(68,906)	(69,024)
Dividends approved in respect of the previous year	34(b)(ii)	–	–	–	–	–	(134,091)	(134,091)
Exercise of share options	34(d)(ii)	492	45,946	–	(8,517)	–	–	37,921
Repurchase of own shares	34(c)	(72)	(8,932)	72	–	–	–	(8,932)
Balance at 31 December 2020 and 1 January 2021	38	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	34(b)(ii)	–	–	–	–	–	(206,848)	(206,848)
Placing and subscription of shares	34(d)(iii)	3,213	686,955	–	–	–	–	690,168
Balance at 31 December 2021	38	49,399	2,753,838	564	3,195	5,770	(956,929)	1,855,837

34 Capital, reserves and dividends (continued)

(b) Dividends

(i) Dividends payable to equity shareholders of the Company in respect of the year:

	2021 RMB'000	2020 RMB'000
Dividend proposed after the end of the reporting period of RMB0.0594 per ordinary share (2020: RMB0.0732 per ordinary share)	**166,093**	187,958

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.

(ii) Dividends payable to equity shareholders of the Company in respect of the previous financial year, approved and paid during the year:

	2021 RMB'000	2020 RMB'000
Dividend in respect of the previous financial year, approved and paid during the year of RMB0.0732 per ordinary share (2020: RMB0.0545 per ordinary share)	**206,848**	134,091

In respect of the final dividend for the year ended 31 December 2020, there is a difference of RMB18,890,000 (2019: RMB4,210,000) between the final dividend disclosed in the 2020 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 placing and subscription of shares on May 2021 and the RMB/HKD exchange rate difference between the fixed middle average exchange rate on the date of the 2020 annual result announcement and the actual exchange rate applied on the date of payment.

(c) Purchase of own shares

During 2020, 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** RMB	**Lowest price paid per share** RMB	**Aggregate price paid** RMB'000
June 2020	4,050,000	2.28	2.15	8,932
				8,932

34 Capital, reserves and dividends (continued)

(c) Purchase of own shares (continued)

In total, the Company repurchased 4,050,000 ordinary shares on the Main Board of The Stock Exchange of Hong Kong Limited at a consideration of RMB8,932,000. All the repurchased shares were treated as cancelled during the six-month period ended 30 June 2020 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 treated as cancelled of RMB72,000 was transferred from Share capital to the capital redemption reserve, and the balance of RMB8,932,000 reduced the share premium.

(d) Share capital

(i) Issued and fully paid share capital

Authorised:

	2021 and 2020	
	No. of Shares ('000)	**Amount USD** '000
Ordinary shares of USD0.0025 each (2020: USD0.0025)	4,000,000	10,000

Ordinary shares issued and fully paid:

	2021			2020		
	No. of shares ('000)	**Amount USD '000**	**RMB equivalent '000**	No. of shares ('000)	Amount USD '000	RMB equivalent '000
At 1 January	**2,595,000**	**6,497**	**46,186**	2,569,050	6,422	45,766
Exercise of share options	**–**	**–**	**–**	30,000	75	492
Repurchase of own shares	**–**	**–**	**–**	(4,050)	(10)	(72)
Placing and subscription of shares	**200,000**	**500**	**3,213**	–	–	–
At 31 December	**2,795,000**	**6,997**	**49,399**	2,595,000	6,487	46,186

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) Shares issued under share option scheme

On 23 November 2020, 29 December 2020 and 30 December 2020, 150,000, 24,292,000 and 5,558,000 options were respectively exercised to subscribe for a total of 30,000,000 ordinary shares in the Company at a consideration of HKD45,000,000, of which HKD585,000 (equivalent to RMB492,000 or USD75,000) was credited to share capital and HKD44,415,000 (equivalent to RMB37,429,000) was credited to share premium. RMB8,517,000 was transferred from the capital reserve to the share premium account in accordance with the policy set out in Note 3(p)(ii).

34 Capital, reserves and dividends (continued)

(d) Share capital (continued)

(iii) 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.

(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.

34 Capital, reserves and dividends (continued)

(e) Nature and purpose of reserves (continued)

(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).

(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 2021, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB1,796,909,000 (2020: RMB1,328,779,000). After the end of the reporting period, the directors of the Company proposed a final dividend of RMB0.0594 per ordinary share (2020: RMB0.0736), amounting to RMB166,093,000 (2020: RMB187,958,000). This dividend has not been recognised as a liability at the end of the reporting period.

34 Capital, reserves and dividends (continued)

(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.

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 2021, 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.

34 Capital, reserves and dividends (continued)

(g) Capital management (continued)

The Group's adjusted net debt-to-capital ratios at 31 December 2021 and 2020 were as follows:

	Note	**2021** **RMB'000**	2020 RMB'000
Current liabilities:			
Interest-bearing borrowings	28	**1,600,786**	2,773,982
Non-current liabilities:			
Interest-bearing borrowings	28	**1,038,000**	591,837
Total debt		**2,638,786**	3,365,819
Add: Proposed dividends	34(b)	**166,093**	187,958
Less: Cash and cash equivalents	27	**(1,356,881)**	(827,246)
Time deposits	26	**(1,749,481)**	(350,000)
Adjusted net debt		**(301,483)**	2,376,531
Total equity		**6,892,557**	5,640,309
Less: Proposed dividends	34(b)	**(166,093)**	(187,958)
Adjusted capital		**6,726,464**	5,452,351
Adjusted net debt-to-capital ratio		**N/A**	44%

35 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.

The Group does not provide any guarantees which would expose the Group to 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, nil% (2020: nil%) and 11% (2020: 4%) of the total trade receivables was due from the Group's largest customer and the five largest customers respectively within DS, HSS and trading of goods 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.

35 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:

	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**

	2020		
	Expected loss rate %	Gross carrying amount RMB'000	Loss allowance RMB'000
Current (not past due)	0.7%	705,643	4,939
1 – 9 months past due	6.2%	322,798	19,885
9 – 21 months past due	18.0%	195,719	35,239
More than 21 months past due	91.2%	29,642	27,032
		1,253,802	87,095

35 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.

Movements in the loss allowance account in respect of trade receivables during the year is as follows:

	2021	2020
	RMB'000	RMB'000
Balance at 1 January	**87,095**	93,710
Amounts written-off during the year	**(5,346)**	(7,982)
Loss allowance recognised during the year	**3,199**	1,367
Balance at 31 December	**84,948**	87,095

(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.

35 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:

		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
Interest-bearing borrowings	28	**1,664,262**	**609,511**	**463,819**	**2,737,592**	**2,638,786**
Trade and other payables	29	**1,373,841**	**–**	**–**	**1,373,841**	**1,373,841**
		3,038,103	**609,511**	**463,819**	**4,111,433**	**4,012,627**

		2020 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
Interest-bearing borrowings	28	2,824,966	528,068	77,830	3,430,864	3,365,819
Trade and other payables	29	1,618,745	–	–	1,618,745	1,618,745
		4,443,711	528,068	77,830	5,049,609	4,984,564

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 2021, which are further detailed in Note 31.

35 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 and HKD.

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.

	2021 Exposure to foreign currencies (expressed in RMB)			2020 Exposure to foreign currencies (expressed in RMB)		
	USD RMB'000	**EUR RMB'000**	**HKD RMB'000**	USD RMB'000	EUR RMB'000	HKD RMB'000
Trade and other receivables	**154,375**	**401,531**	**10,776**	407,671	407,818	36,615
Cash and cash equivalents	**105,105**	**246,835**	**21,541**	4,946	39,444	1,198
Trade and other payables	**(836)**	**–**	**–**	(40)	(927)	(20,118)
Interest-bearing borrowings	**(205,361)**	**(494,943)**	**–**	(233,265)	(603,691)	(74,921)
Net exposure arising from recognised assets and liabilities	**53,283**	**153,423**	**32,317**	179,312	(157,356)	(57,226)

35 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.

	2021		2020	
	Increase in foreign exchange rates	**Increase in profit after tax and retained profits RMB'000**	Increase in foreign exchange rates	Increase/ (decrease) in profit after tax and retained profits RMB'000
USD	**5%**	**2,273**	5%	9,058
EUR	**5%**	**6,567**	5%	(6,606)
HKD	**5%**	**1,576**	5%	(2,865)

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 2020.

35 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 28.

(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:

	2021 RMB'000	2020 RMB'000
Fixed rate instruments		
Interest-bearing borrowings	**(244,180)**	(877,275)
Variable rate instruments		
Interest-bearing borrowings	**(2,394,606)**	(2,488,544)

(ii) Sensitivity analysis

As at 31 December 2021, 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 RMB22,341,000 (2020: RMB21,149,000).

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 2020.

35 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 2021, it is estimated that an increase/(decrease) of 10% (2020: 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:

	2021			2020		
		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%**	**3,911**	**10,602**	10%	1,869	8,863
Decrease	**(10%)**	**(3,911)**	**(10,602)**	(10%)	(1,869)	(8,863)

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 2020.

35 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 2021 RMB'000	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**	**–**

35 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 2020 RMB'000	Fair value measurement at 31 December 2020 categorised into Level 1	Level 2	Level 3
Recurring fair value measurement				
Other financial assets:				
– Listed equity securities – SESH	54,600	54,600	–	–
– Listed equity securities – NEEQ	48,350	–	–	48,350
– Unlisted equity securities	7,940	–	–	7,940
– Unlisted units in investment funds	24,920	–	–	24,920
Financial assets at fair value through profit or loss:				
– Listed equity securities	19,528	19,528	–	–
– Unlisted debt securities	857,589	–	857,589	–
Trade and other receivables:				
– Bills receivable	850,660	–	850,660	–

During the years ended 31 December 2021 and 2020, 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.

35 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:

	2021 **RMB'000**	2020 RMB'000
Unquoted equity securities and units in investment fund:		
At 1 January	**81,210**	69,100
Payment for purchase of other financial assets	**16,000**	1,000
Proceeds from disposal of other financial assets	**(282)**	(718)
Net unrealised gains recognised in other comprehensive income during the year	**15,490**	13,720
Unrealised fair value changes of other financial assets during the year	**11,502**	(1,892)
At 31 December	**123,920**	81,210

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 2021 and 31 December 2020.

36 Commitments

Capital commitments outstanding as at 31 December 2021 not provided for in the consolidated financial statements were as follows:

	2021 **RMB'000**	2020 RMB'000
Contracted for	**138,169**	69,910
Authorised but not contracted for	**883,918**	474,520
	1,022,087	544,430

37 Material related party transactions

(a) Key management personnel remuneration

Key management personnel remuneration represents amounts paid to the Company's directors as disclosed in Note 10 and the highest paid employees as disclosed in Note 11.

(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"), Weijian Tools prior to the business combination as disclosed in Note 39, 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.

37 Material related party transactions (continued)

(b) Transactions with related companies (continued)

(i) Significant related party transactions

	2021 RMB'000	2020 RMB'000
Sale of goods to:		
Joint ventures	**391,794**	252,037
Associates	**407,344**	85,971
Weijian Tools	**–**	22,372
	799,138	360,380
Purchase of goods from:		
Joint ventures	**–**	367
Associates	**1,852**	27
	1,852	394
Lease expenses to:		
Weijian Tools	**–**	616
Rental income from:		
An associate	**142**	–
Acquisition of the equity interest in Weijian Tools from:		
Company controlled by Mr. Zhu Zefeng	**–**	90,554
Acquisition of the equity interest in an associate from:		
Company controlled by Mr. Zhu Xiaokun	**–**	1,400

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.

37 Material related party transactions (continued)

(b) Transactions with related companies (continued)

(ii) Significant related party balances

	2021 RMB'000	2020 RMB'000
Trade and other receivables due from		
Joint ventures	**424,813**	378,812
Associates	**65,846**	88,876
	490,659	467,688
Trade and other payables due to		
Joint ventures	**–**	265
Associates	**361**	176
	361	441

(c) Applicability of the Listing Rules relating to connected transactions

The related party transactions in respect of lease expenses paid and goods sold to Weijian Tools prior to the business combination, acquisition of the equity interest in Weijian Tools from the controlling shareholder's company and acquisition of the equity interest in an associate from controlling shareholder's company during 2020 mentioned in Note 37(b) above constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules. The disclosures required by Chapter 14A of the Listing Rules are provided under the section "Continuing Connected Transactions" in the Report of Directors. Apart from these transactions, none of the other related party transactions mentioned in Note 37 fall under the definition of a connected transaction or continuing connected transactions as defined in Chapter 14A of the Listing Rules.

38 Company-level statement of financial position

	2021 RMB'000	2020 RMB'000
Non-current assets		
Property, plant and equipment	**11**	11
Interest in subsidiaries	**1,833,854**	1,433,447
Interest in associates	**3,034**	13,347
Other receivables	**11,343**	25,534
	1,848,242	1,472,339
Current assets		
Cash and cash equivalents	**9,780**	7,363
	9,780	7,363
Current liabilities		
Interest-bearing borrowings	**–**	74,917
Trade and other payables	**2,185**	20,228
	2,185	95,145
Net current assets/(liabilities)	**7,595**	(87,782)
Net assets	**1,855,837**	1,384,557
Capital and reserves		
Share capital	**49,399**	46,186
Reserves	**1,806,438**	1,338,371
Total equity	**1,855,837**	1,384,557

39 Business combination

On 5 December 2020, the Group, through its wholly owned subsidiary TG Tools, acquired 100% of the equity interest in Weijian Tools, which is principally engaged in manufacturing and selling of high speed steel at a cash consideration of RMB108,750,000. As at 31 December 2021, the Group owns 100% of the equity interest in Weijian Tools.

The following table summarises the estimated fair value of the assets acquired and liabilities assumed as at the acquisition date:

	Fair value on acquisition RMB'000
Property, plant and equipment (Note 14)	61,482
Lease prepayments (Note 15)	37,158
Intangible assets (Note 16)	19,000
Trade and other receivables	45,577
Cash and cash equivalents	25,259
Deferred tax assets (Note 33(b))	575
Inventories	23,415
Trade and other payables	(4,914)
Interest-bearing borrowings	(85,000)
Deferred tax liabilities (Note 33(c))	(13,802)
Identifiable net assets	108,750
Satisfied by:	
Cash consideration paid	108,750

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 2020, Weijian Tools contributed revenue of RMB6,337,000 and net profit of RMB713,000.

The consolidated revenue and net profit of the Group for the year ended 31 December 2020 would have been RMB5,266,634,000 and RMB536,466,000, respectively had the acquisition been completed as at 1 January 2020.

(Expressed in Renminbi unless otherwise indicated)

40 Immediate and ultimate controlling parties

At 31 December 2021, 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 2021, the directors of the Company consider the ultimate controlling parties of the Group to be Mr. Zhu Xiaokun and Mr. Zhu Zefeng.

41 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 34(b).

42 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2021

Up to date of issue of these financial statements, the IASB has issued a number of amendments and a new standard, IFRS 17, Insurance contracts, which are not yet effective for the year ended 31 December 2021 and which have not been adopted in the consolidated financial statements. These include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Amendments to IFRS 3, *Reference to the conceptual framework*	1 January 2022
Amendments to IAS 16, *Property, plant and equipment: Proceeds before intended use*	1 January 2022
Amendments to IAS 37, *Onerous Contracts – cost of fulfilling a contract*	1 January 2022
Annual improvements to IFRSs 2018–2020 cycle	1 January 2022
Amendments to IAS 1, *Classification of liabilities as current or non-current*	1 January 2023
Amendments to IAS 1 and IFRS Practice Statement 2, *Disclosure of accounting policies*	1 January 2023
Amendments to IAS 8, *Definition of accounting estimates*	1 January 2023
Amendments to IAS 12, *Deferred tax related to assets and liabilities arising from a single transaction*	1 January 2023

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				
	2021	2020	2019	2018	2017
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Revenue	**5,744,873**	5,220,944	5,369,873	5,021,546	3,898,443
Profit before taxation	**751,655**	621,817	450,371	280,568	218,097
Income tax	**(80,025)**	(81,495)	(46,353)	(13,598)	(43,396)
Profit for the year	**671,630**	540,322	404,018	266,970	174,701
Other comprehensive income/(loss) for the year	**12,344**	1,955	14,360	(11,607)	(14,555)
Attributable to:					
Equity shareholders of the Company	**676,701**	538,979	409,452	247,228	154,544
Non-controlling interests	**7,273**	3,298	8,872	8,135	5,602
Earnings per share (RMB)					
Basic (RMB)	**0.244**	0.209	0.156	0.106	0.076

	As at 31 December				
	2021	2020	2019	2018	2017
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Assets					
Non-current assets	**4,803,513**	4,588,826	4,261,913	3,923,593	3,801,667
Current assets	**7,761,073**	6,609,300	5,954,464	6,112,759	4,902,213
Total assets	**12,564,586**	11,198,126	10,216,377	10,036,352	8,703,880
Liabilities					
Non-current liabilities	**1,188,397**	750,952	764,909	1,011,943	917,991
Current liabilities	**4,483,632**	4,806,865	4,248,334	4,201,449	3,482,924
Total liabilities	**5,672,029**	5,557,817	5,013,243	5,213,392	4,400,915
Equity					
Total equity	**6,892,557**	5,640,309	5,203,134	4,822,960	4,302,965

Note: The results of the Group for the four financial years ended 31 December 2017, 2018, 2019 and 2020 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

Registered Office in the Cayman Islands
P.O. Box 309
G.T. Ugland House
South Church Street, George Town
Grand Cayman, Cayman Islands

Registered Office in Hong Kong
20/F, Tien Chu Commercial Building
173–174 Gloucester Road
Wanchai
Hong Kong

Principal Place of Business
Zhenjiang City
Jiangsu Province
The PRC

Auditors
KPMG
Certified Public Accountants
Public Interest Entity Auditor registered in accordance with the Financial Reporting Council Ordinance
8/F Prince's Building
10 Chater Road
Central, Hong Kong

Hong Kong Legal Adviser
Reed Smith Richards Butler
17th Floor, One Island East
18 Westlands Road
Taikoo Place, Quarry Bay
Hong Kong

Principal Share Registrar and Transfer Office

Suntera (Cayman) Limited
Suite 3204, Unit 2A
Block 3, Building D
P.O. Box 1586
Gardenia Court, Camana Bay
Grand Cayman, KY1-1100, Cayman Islands

Hong Kong Branch Share Registrar and Transfer Office in Hong Kong

Computershare Hong Kong Investor Services Limited
Shops 1712–1716, 17th Floor
Hopewell Center
183 Queen's Road East
Wanchai
Hong Kong

Principal Bankers

China Construction Bank Corporation
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

Investor Relations

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