
GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains terms used in this prospectus in connection with our Group and our business. Some of these terms and their meanings may not correspond to standard industry meanings or usage of such terms.

“13th Five-Year Plan”	the 13th Five-Year Plan (2016–2020) for National Economic and Social Development of the PRC (中華人民共和國國民經濟和社會發展第十三個五年規劃)
“CAGR”	compound annual growth rate
“CIF”	cost, insurance and freight, a shipping arrangement where the seller is responsible for costs and assumes liability until the goods reach a destination chosen by the buyer
“fluorine”	a chemical element with symbol F
“high-purity niobium pentoxide”	a type of niobium pentoxide with a purity of not less than 99.95%, which is widely used for the production of optical glass and niobate
“high-purity tantalum pentoxide”	a type of tantalum pentoxide with a purity of not less than 99.95%, which is widely used for the production of optical glass and tantalate
“HSLA steel”	high-strength low-alloy steel, a kind of corrosion-resistant and malleable steel
“hydrometallurgy”	a technique for the recovery of a metal from an aqueous medium in which the metal is preferentially dissolved (濕法冶金), and is employed to produce tantalum- and niobium-based hydrometallurgical products including tantalum pentoxide, niobium pentoxide and potassium heptafluorotantalate
“industrial grade niobium pentoxide”	a type of niobium pentoxide with a purity of ranging from 99.0% to 99.6% according to a PRC national standard issued by MIIT, which is a versatile metallurgical material used in the manufacturing processes across the metallurgical, chemical, ceramics, aeronautics and other industries
“industrial grade tantalum pentoxide”	a type of tantalum pentoxide with a purity of ranging from 99.0% to 99.6% according to a PRC national standard issued by MIIT, which is a versatile metallurgical material used in the manufacturing processes across the metallurgical, chemical, hard alloy and other industries

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“ISO”	the International Organisation for Standardisation, an independent non-governmental organisation that develops and publishes international standards
“ISO 14001”	standards developed and published by the ISO that help organisations minimise the negative effects of their operations on the environment and comply with applicable laws, regulations and other environmentally oriented requirements
“ISO 9001”	standards developed and published by the ISO for all organisations, regardless of type, size and product for a quality assurance system
“loaded organic phase”	an organic solution containing other substances, such as tantalum and niobium
“Made in China 2025”	a ten-year guideline and the equivalent of Industry 4.0 proposed by the PRC Government in a circular issued by the State Council on 8 May 2015, to encourage the development and transition of China’s manufacturing industry towards high-end smart manufacturing
“niobium”	a chemical element with symbol Nb
“niobium ores”	ores that contain niobium normally in the form of pentoxide, where the grade of ores varies in terms of pentoxide concentration
“niobium pentoxide”	an inorganic chemical compound with the chemical formula Nb_2O_5
“OHSAS”	the occupational health and safety management systems, which provides a framework for organisations to identify and control its occupational risks and to improve their occupational safety and health performance
“OHSAS 18001”	the requirements for occupational health and safety management system developed for managing the occupational health and safety risks associated with a business
“pentoxide products”	comprises tantalum pentoxide (Ta_2O_5) and niobium pentoxide (Nb_2O_5)
“potassium heptafluorotantalate”	a chemical element with chemical formula K_2TaF_7

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“powder metallurgy”	a metal-forming process that moulds and compresses metallic powder into a specific shape and size and sinters the metal at high temperature. The conversion of tantalum powder into tantalum bars by powder metallurgy process involves four major procedures: (1) multiple batches of tantalum powder are blended in a V-shape mixer; (2) a flexible mould filled with blended tantalum powder is placed in a cold isostatic press and is compressed at 150–210 megapascal; (3) tantalum billet generated from the previous procedure is then sintered in a sintering furnace at a temperature between 1700°C and 2500°C; and (4) after insulating the metal for a period of time and cooling down, a tantalum bar is formed
“production volume”	the volume of goods produced within a certain period to be ready for sale
“pyro-metallurgy”	a metallurgical technique performed at high temperatures, including sintering, roasting, smelting, casting, refining, and alloying, etc. (火法冶金), and is employed to produce tantalum- and niobium-based pyro-metallurgical products including tantalum powder
“tantalum”	a chemical element with symbol Ta
“tantalum ores”	ores that contain tantalum normally in the form of pentoxide, where the grade of ores varies in terms of pentoxide concentration
“tantalum pentoxide”	an inorganic chemical compound with the chemical formula Ta_2O_5
“target materials”	a slab of coating material used in the coating process for manufacturing a variety of industrial products
“tonne”	metric tonne, equivalent to 1,000 kg
“YS/T 427-2012”	a PRC national standard issued by MIIT for industrial grade tantalum pentoxide
“YS/T 428-2012”	a PRC national standard issued by MIIT for industrial grade niobium pentoxide
“YS/T 547-2007”	a PRC national standard issued by NDRC for high-purity tantalum pentoxide

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“YS/T 548-2007” a PRC national standard issued by NDRC for high-purity niobium pentoxide

“YS/T 578-2006” a PRC national standard issued by NDRC for potassium heptafluorotantalate